

EXPLORING RESISTANCE TO CHANGE AND INTOLERANCE TO AMBIGUITY IN HIGHER EDUCATION INSTITUTIONS

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Abstract

The current environment of higher education is one of constant change. Individual faculty and staff are under great pressure, and forced to cope and understand through their behavioral lens while navigating change processes. Institutions compete for students, revenue, and are forced to adapt and innovate to improve consumer perception and demand, causing tremendous strain amongst employees. Faculty and staff bear the burden to deliver better production and student outcomes, and they exhibit behaviors of resistance or acceptance of change. The current study utilized a descriptive, non-experimental, correlational design to examine higher education administrators, faculty and staff ratings of their level of tolerance of ambiguity, resistance to change, and level of mindfulness across institutions of higher education. This quantitative study sought to identify the strengths of the relationship between intolerance of ambiguity, resistance to change, and mindfulness. Findings included a significant relationship existing between intolerance to ambiguity and resistance to change.

Keywords: Resistance, intolerance of ambiguity, mindfulness, higher education change.

INTRODUCTION AND BACKGROUND

Due to an uncertain future, external scrutiny, and increased financial pressures, the emotional stress within higher education institutions is enormous. Change in higher education is a way of life, as university stakeholders struggle to keep abreast of the latest technologies, methodologies, and competitive advancements. Leaders are faced with unsustainable financial models, and tasked with rebuilding and transforming their institutions, and often forced to face situations analogous to driving down roads while building those same roads. Administrators, staff, and faculty are tasked with making it all work within an increasingly faster-paced and efficient environment. The behavioral constructs of the individual reaction to change is an essential piece of change success.

Bolman and Gallos (2011) described colleges and universities as complex institutions populated by a hodgepodge of divergent missions at various stages of crisis, innovation, or development. Incoming academic leaders struggle to interpret their new environment, yet their success at deciphering ambiguity is essential in order to make decisions on what to change. Institutions are full of conflicting goals within their most essential of missions (i.e., teaching versus research). Administrators, faculty, and staff struggle to comprehend and navigate the ingrained governance and inertial processes (Bolman & Gallos, 2011). Power structures exist within higher education institutions which can have an effect on the management of change initiatives. The structures have layers, and persons within the layers can negatively or positively affect the interpretation of the change initiative through dialogue, perhaps leading to resistance (Knight & Trowler, 2000; Deneen & Boud, 2014).

Wilson (2013) described higher education institutions as becoming more homogenous due to competition, causing imitation, and resulting in less diversity between institutions. However, higher education is also changing rapidly to demonstrate differentiation to its student consumers, becoming unrecognizable to its appearance from only a few decades ago. Students are more mobile than ever before, traveling internationally and reducing great distances through the use of technology, increasing institutional and

educational delivery choices. The traditional student demographic is shifting, and more students are working and going to school at the same time. Faculty tenure is slowly disappearing, and use of adjuncts is increasing. Pressure to survive as a college mounts on faculty and staff to demonstrate value and deliver an attractive product to entice students to enroll (Staley & Trinkle, 2011). The higher education system, so-called, has evolved drastically, and its inhabitants live in an environment of constant change.

Attitudes and Resistance to Change

Resistance routinely is considered the enemy of successful change (Waddell & Sohal, 1998). Cognitive dissonance, often associated with resistance, is the state of mental discomfort experienced by an individual caused by possessing conflicting cognitive ideas (Festinger, 1957). These individual states of confusion or disconnect can occur during change efforts, and can lead to seemingly resistant behavior in employees. The result of proposed change initiatives can cause cognitive dissonance in staff or faculty members, who are uncertain how to interpret new information or why change is necessary. Nolan and Nail (2014) conducted a quantitative research study with 81 university students as participants, and concluded individuals who do not like change are more inclined to experience cognitive dissonance. Additional findings included that dissonance was related more to practical rather than emotional reasons in the individual. Lilly and Durr (2012) looked at cognitive dissonance theory in a quantitative study on technological changes at work. The findings showed that leadership style and leader behavior can cause cognitive dissonance in the employee, negatively affecting employee attitude toward accepting change. Leaders, as change agents planning a change event, often overlook the promotion of a new mindset for their employees as an essential part of the implementation plan (de Vries, Ramo, & Korotov, 2009).

It is human nature for people to become set in their ways over time. Similarly, organizations develop systems and behaviors for performing tasks, becoming less flexible as their processes become refined. This inertia restricts the ability of organizations to change or adapt (Hannan & Freeman, 1977). Levinthal (1991) noted how as people and organizations become more experienced, alternative methods for performing work are discarded for more efficient ones. This system of learning discourages experimentation and inertia increases with organizational age. Organizational inertia has many causes, but the condition in the end is similar: a built-in resistance develops within an organization because of the behaviors of individuals, and any new solutions or changes must be well understood to loosen the hold of inertia (Hannan & Freeman, 1984). Others describe inertia as the sum of the shared individual resistant conduct. This effect works to slow or halt momentum in the change initiative (Wong-Mingji & Millette, 2002). As principles and processes are passed on in higher education institutions from one generation to another, inertial practices become ingrained in the fabric of the institution (Lane, 2007). Sydow, Schreyogg, and Koch (2009) reexamined studies on institutional reactions to technological advances and concluded there are benefits to organizational inertia, but also a paradox. The very systems and processes that become built-into organizations over time in order to protect its operations and provide stability can threaten necessary changes to take place.

Most literature describes resistance to change as a natural process taking place in the human condition due to uncertainty and fear (Connor, 1992; Kotter, 1995), and Piderit (2000) argued that resistance to change could be lessened if uncertainty and fear was reduced. Leaders often place blame on employees instead of taking responsibility of failed change initiatives themselves (Kotter, Schlesinger, & Sathe, 1986). According to Smollan (2011), stakeholders at all levels resist change, and not simply non-managerial employees. Alternatively, resistance and conflict are often considered necessary tools in the business world to strengthen decisions. This was confirmed in a qualitative study of 98 CEOs and 21 top business leaders. Specifically, the study showed decision quality was improved by functional conflict (Amason, 1996). Kezar (2013) suggested the most common causes of resistance were due to a lack of trust in

leadership; lack of belief or understanding of the idea on which the change is based on; or developed cynicism due to a history of other failed changes.

Organizational cynicism is a negative attitude towards the organization, management, leadership, or peers. A feeling of distrust develops over time between individuals or groups within the organization. Cynicism can become ingrained in the people, systems, and culture, making adaptation difficult. Employees become accustomed to ineffective change or no change. They are demoralized that problems cannot be fixed within the organization. The perception is management might not be telling their true motives for change. The more change initiatives fail, the more pessimism, and the more embedded the organizational cynicism (Ozler, Derya, & Ceren, 2011; Vance, Brooks, & Tesluk, 1996).

Mindfulness

Mindfulness has been defined as an open mind enabling the individual to perceive differences among similar subjects and similarities among different subjects (Langer, 1993). Langer (1997) later added three characteristics of mindfulness, which included a) creation of new categories, b) the state of being open to new knowledge, and (c) possessing an awareness of more than one perspective. According to Dane (2011), mindful people can separate their interpretations from biased mental shortcuts and ‘gut’ decisions, and reflectively change them if necessary. Gärtner (2011) offered that mindful people are more likely to be thoughtful about new ideas and less allegiant to old decisions, creating new behaviors and less resistance to change.

Weick and Sutcliffe (2006, 2007) argued mindfulness could become a collective group amongst like-minded individuals who are more amenable to change, less susceptible to organization inertia due to their adaptive practices, and together understanding the ‘big picture.’

Intolerance of Ambiguity

Frenkel-Brunswik was one of the first to present analysis of ambiguity tolerance and, defining intolerance as “the tendency to perceive ambiguous situations as sources of threat” and tolerance as “the tendency to perceive ambiguous situations as desirable” (Budner, 1962, p. 29). Budner (1962) created the Tolerance of Ambiguity scale to understand the responses of individuals toward the concept of ambiguity. Martin (1954) defined intolerance to ambiguity as individuals preferring structure and routine who were more inclined to desire predictability and consistency, and more concerned about limiting ambiguous situations. Ellsberg (1961) linked decision-making, risk tolerance, and tolerance of ambiguity, suggesting that optimistic decisions relied on more favorable information, ignoring other cues, whereas more risk-averse individuals made decisions by focusing on the least desirable information. Ellsberg’s description follows Frenkel-Brunswik (1949), who described intolerance of ambiguity as a personality variable, and he found that individuals intolerant to ambiguity would reject and reduce “ambiguous cognitive patterns” in favor of certainty and the more familiar (p. 140). Frone (1990) found that individuals with a high intolerance for ambiguity experienced greater stress in occupational roles where ambiguity was high, and management should develop programmes to counteract the levels of ambiguity. Additionally, managers should be trained to possess a level of awareness on tolerance of ambiguity, and the personality variable of ambiguity tolerance should be considered during the hiring process so persons are best matched to a role which matches their tolerance level (Frone, 1990).

METHODOLOGY

In this quantitative, non-experimental study, data was collected utilizing three instruments: Budner’s (1962) Tolerance of Ambiguity Scale (TOA), Oreg’s (2003) Resistance to Change Scale (RTC), and the Langer Mindfulness Scale (Pirson, Langer, Bodner, and Zilcha, 2012). Three additional questions were added to the survey but were not considered in the results of this study. Univariate relationships among

constructs were assessed using regression models. The mean, median, mode, standard deviation, and other selected variables were measured through the use of descriptive statistics. The relationship between factors of mindfulness and tolerance of ambiguity and their influence of resistance to change was determined through linear regression analysis. The psychometric scores from each instrument and resistance to change ratings to test the significance of the relationships between each subscale were computed through the use of bivariate correlations, and statistical analyses were conducted in multiple phases to investigate the relationship between the individual psychometric traits and resistance for higher education employees.

In order to test for validity, the results were compared to a similar study using the same three instruments conducted with several industries in the manufacturing sector in Kentucky (Dunican & Keaster, 2015). The results were similar in all subscales, and across all population types.

Participants

The population was made up of faculty, staff, and administrators self-identifying as working full time at U.S higher education institutions, and who volunteered to participate in the survey. A total of 38 participants completed the electronic survey designed to capture complete responses to a total of 51 questions. Participants could not proceed through the survey unless all questions were answered. Three persons did not complete the survey, and their responses were not included in these results. Participants were reached through a process of snowball-sampling, which was used to access individuals from all levels and within a variety of higher education settings. The qualitative survey was sent to known participants, who had the option of sending the surveys to other individuals. Snowball sampling has been criticized due to the potential for selection bias, which could limit the validity of the sample (Kaplan, Korf, & Sterk, 1987). Another critique of snowball sampling methods is the samples are not random but dependent on the choices of the initial respondents (Griffiths, Gossop, Powis, & Strang, 1993). According to Van Meter (1990), the selection bias problem can be addressed in part through a large sample size, which is not the case here, or through the replication of results. The authors argue that the validity of the data is more reliable through use of the three thoroughly-researched instruments: Budner's (1962) Tolerance of Ambiguity Scale (TOA), Oreg's (2003) Resistance to Change Scale (RTC), and the Langer Mindfulness Scale (LMS) as described by Pirson, Langer, Bodner, and Zilcha (2012). Additionally, the similarity in responses to a previous study in a different industry also adds validity to the collected data, and a case could be made that these similarities constitute a replication of results (Dunican & Keaster, 2015).

Tolerance of Ambiguity Scale

Budner's (1962) Tolerance of Ambiguity scale contains three subscales (novelty, complexity, and insolubility) adding more specific detail underneath the ambiguity paradigm. The TOA mean (and not the subscales) were considered in this study. The scale contains 16 items with ratings from 1 to 7. 1 represents a strong disagreement, or a greater tolerance of ambiguity. The higher score indicates greater intolerance of ambiguity.

Resistance to Change Scale

Oreg (2003) created the Resistance to Change scale and its four subscales, which are: routine seeking (RC), emotional reaction (ER), short-term focus (STF), and cognitive rigidity (CR). The scale contains 17 items with ratings of 1 to 6, with 1 indicating a lower level of resistance. The higher scores on the overall scale or subscales indicate a higher resistance to change.

Langer Mindfulness Scale

The Langer Mindfulness Scale (Pirson, Langer, Bodner, and Zilcha, 2012) contains 14 items and assesses three subscales of mindfulness: novelty seeking (NS), engagement (E), and novelty producing (NP). The 7-point Likert scale ranges from 1 to 7, with 1 indicating strongly disagree to 7 as strongly agree. Higher scores on the 7-point scale indicate greater levels of awareness and thinking.

Research Questions

1. What is the degree of relationship among the measures of Tolerance of Ambiguity and Resistance of Change for staff and faculty at higher education institutions?
2. What is the degree of relationship among the measures of Mindfulness and Tolerance of Ambiguity for staff and faculty at higher education institutions?
3. How are the psychometric mindset of mindfulness and tolerance of ambiguity related to resistance of change for staff and faculty within higher education institutions?

RESULTS

The results presented in the current study provided correlations related to the responses of three validated instruments. The demographics that were reported represented gender, education, the number of years at the institutions, and the number of direct reports for the 38 participants. Other demographics related to age and ethnicity was recorded, yet statistical analyses were not conducted due to the disproportion distribution of the data collected.

Table 1. Demographic and Organizational Information of Participating Salaried Employees (*N* = 38)

Variable	Level	<i>n</i>	Percent
Gender	Male	11	28.95
	Female	27	71.05
Education	4-year College Degree	4	10.53
	Master's Degree or higher	34	89.47
Years at Institution	0 to 4 years	8	21.05
	5 to 10 years	17	44.74
	11 to 20 years	9	23.68
	21 years or more	4	10.53
Direct Reports	0 Direct Reports	8	21.05
	< or = 9 Direct Reports	22	57.90
	> 10 Direct Reports	8	21.05

Note. Descriptive analyses were provided for values in the above table.

The ages of the participants ranged from 28 to 65 years of age, and for ethnicity, 92% (34) were Caucasian and 8% (4) were minorities. Due to imbalanced distributions, statistical analysis was not performed for *Age* or *Education*. The frequency distribution reflected that 28.95% (11) were males, while the remaining 71.05% (27) were females. More than twice as many females than males participated in the study, yet there were little to no statistical differences for the outcome within gender. A one-way ANOVA was conducted to compare whether males or females reacted differently to change, ambiguity tolerance or change. Taken together, only one variable reflected a significant difference at the $p < .05$ level for Cognitive Rigidity [$F(1, 36) = 7.775, p = 0.008$]. Specifically, the results suggested based on the sample size, indicates that males and females in this study were different in terms of flexibility for changing one's mind when faced with fluctuating conditions. The mean scores for males were greater than females, which indicate males were less likely to change their minds, and females were more likely, or perhaps more open, to changing their minds when faced with fluctuating conditions. Participants who possessed a four-year degree represented 10.53% (4) and 89.47% (34) obtained a master's degree or higher.

Table 2. Descriptive Statistics and Correlations among Responses of TOA, LMS and Subscales, and RTC and Subscales

Scales	LMS_5NS	LMS_5NP	LMS_4E	TOA_Mean	RTC_5RS	RTC_4ER	RTC_4STF	RTC_4CR
LMS_5NS	(.83)							
LMS_5NP	.64**	(.85)						
LMS_4E	.56**	.49**	(.65)					
TOA_Mean	-.34*	-.019	-.0317	(.58)				
RTC_5RS	-.47**	-.522**	-.460**	.518**	(.73)			
RTC_4ER	-.37*	-.0295	-.325*	.446**	.584**	(.77)		
RTC_4STF	-.49**	-.392*	-.380*	.345*	.488**	.709**	(.70)	
RTC_4CR	-.09	-.0147	-.0151	0.315	0.068	-0.020	0.278	(.67)
# of items	5	5	4	16	5	4	4	4
Mean	6.10	5.42	5.92	3.32	2.67	3.19	2.80	3.51
SD	.77	1.15	0.82	0.54	0.67	0.90	0.80	0.72

Note. N = 38. Cronbach's alpha reliabilities for each dimension/construct are listed in parentheses on diagonal. Cronbach's Alpha measures indicated a high internal consistency among the items reflected in each scale. Cronbach's alpha reliability coefficient normally ranges between 0 and 1. The closer the coefficient is to 1.0, the greater is the internal consistency of the items (variables) in the scale.

* $p < .05$ level (two-tailed)

** $p < .01$ level (two-tailed)

Table 3. Descriptive Statistics and Correlations Among Responses of the Total TOA, LMS, and RTC

Scales	LMS_TotalMean	TOA_TotalMean	RTC_TotalMean
LMS_TotalMean	(.886)		
TOA_TotalMean	-.313	(.578)	
RTC_TotalMean	-.563**	.566**	(.835)
Number of Items	14	16	17
Mean	5.80	3.32	3.02
Standard Deviation	0.78	0.54	0.56

Note. N = 38. Cronbach's alpha reliabilities for each dimension/construct are listed in parentheses on diagonal. No subscales for Tolerance of Ambiguity were referenced in research. Cronbach's Alpha measures indicated a high internal consistency among the items reflected in each scale.

*p < .05 level (two-tailed)

**p < .01 level (two-tailed)

Table 4. Descriptive Statistics and Correlations among Responses Related to Operational and Demographic Factors, TOA, LMS and Subscales, and RTC and Subscales

Scales	MEAN	SD	AGE	YRSWRK	DRRPTS	TOA_M	LMS_M	LMS_NS	LMS_NP	LMS_E	RTC_M	RTC_RS	RTC_ER	RTC_STF	RTC_CR
AGE	45.68	10.86	1.00												
YRSWRK	6.79	11.73	.382*	1.00											
DRRPTS	10.29	7.71	.486**	.23	1.00										
TOA_M	3.32	0.54	-.23	-.374*	0.01	1.00									
LMS_M	5.80	0.78	0.08	0.26	-0.12	-0.31	1.00								
LMS_NS	6.10	0.77	-0.03	0.18	-0.31	-.339*	.858**	1.00							
LMS_NP	5.42	1.15	-0.01	0.25	-0.10	-0.19	.897**	.641**	1.00						
LMS_E	5.92	0.82	0.31	0.22	0.13	-0.32	.753**	.562**	.486**	1.00					
RTC_M	3.02	0.56	-0.06	-0.24	-0.05	.566**	-.563**	-.498**	-.474**	-.461**	1.00				
RTC_RS	2.67	0.67	-0.12	-0.20	0.01	.518**	-.579**	-.474**	-.522**	-.460**	.762**	1.00			
RTC_ER	3.19	0.90	0.03	-0.15	-0.06	.446**	-.382*	-.368*	-0.30	-.325*	.819**	.584**	1.00		
RTC_STF	2.80	0.80	-0.01	-0.20	-0.02	.345*	-.492**	-.488**	-.392*	-.380*	.864**	.488**	.709**	1.00	
RTC_CR	3.51	0.72	-0.09	-0.16	-0.09	0.32	-0.15	-0.09	-0.15	-0.15	.416**	0.07	-0.02	0.28	1.00

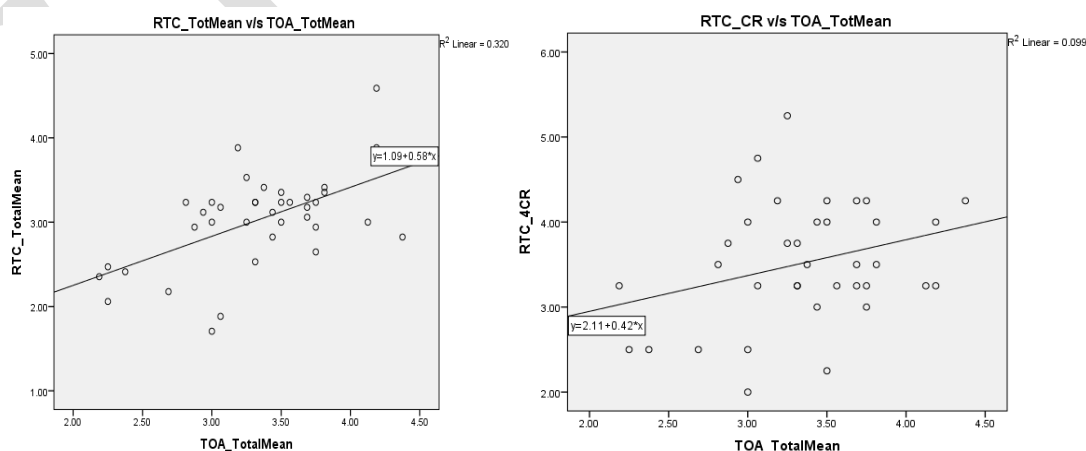
Note. N = 38. The correlation coefficient ranges from -1 to +1, with -1 indicating a perfect negative correlation; +1 indicating a perfect positive correlation, and 0 indicating no correlation.

The first research question explored the degree of the relationships among Tolerance of Ambiguity (TOA) and Resistance to Change (RTC). The findings were reported from the analyses of data collected from the 38 participants from a variety of higher education institutions. The total means scores between the two constructs revealed a strong and significant relationship $r(38) = .566, p < .001$. Denoted by the strengths of the relationships between two variables, Cohen's (1988) explanation was implied for the coefficients, which were values between .10 and .29 were measured as small or weak, those between .30 and .49 were measured as medium or moderate, and values between .50 and 1.0 were measured as large or strong. Individuals with higher scores had a tendency of exhibiting a high intolerance of ambiguity and those who scored low were comparatively more tolerant of ambiguity. The researchers interpreted lower mean scores (RTC mean score ≥ 3.99) for Resistance to Change to reflect a positive disposition towards change and higher scores inferred change as undesirable (RTC mean score ≥ 4.00). Additionally, bi-variate correlation analyses were conducted, accompanied with the means, standard deviations, and Cronbach's alpha. Cronbach's alpha indicates the consistency of how closely a set of items are related as a group and reflects a scale's reliability. The resulting coefficient of reliability ranges from 0 to 1. The higher the alpha coefficient indicates that more items have a shared covariance and have a higher probability in measuring the same underlying concept.

The second research question used bivariate correlations to determine the strength of the relationships between the psychometric constructs of mindfulness and tolerance of ambiguity. The total mean scores related to the Pearson correlations indicated a small (weak) negative correlation $r(38) = -.313, p < .005$ and were not statistically significant, illustrating that the outcomes occurred by chance. There was not enough evidence to state at this relationship exists in the population.

The last question explored how Mindfulness and Tolerance of Ambiguity related to Resistance to Change in higher learning institutions. The means of both the Budner's (In)Tolerance of Ambiguity Scale and the Oreg's Resistance to Change subscales reflected a strong positive relationship that was significant $r(38) = .566, p < .001$, with the exception of the subscale Cognitive Rigidity. Respectively, relationships revealed that those who scored higher have a greater intolerance for change and those who scored lower have a positive disposition towards change. There was not enough evidence to show correlations between the mean scores for RTC_CR (cognitive rigidity) and TOA to be statistically significant. The results indicated that the small positive correlation within the sample does not represent the population. More research is required to determine the level of significance in a larger population.

Table 5. Scatterplot comparisons of TOA Total Mean to RTC Total Mean and Cognitive Rigidity



The mean of both the Mindfulness and the Oreg's Resistance to Change subscales indicated a strong negative relationship that was significant $r(38) = -.563, p < .001$. Again, Cognitive Rigidity was not statistically significant.

The mean for responses for TOA, RTC, and Mindfulness indicated no significant statistical difference across those participants with or without direct reports. Years at the institution also indicated no statistical differences.

Limitations of Study

As with any study, the current research is limited to the decisions of the participants who volunteered to partake in the study, the chosen research methods, and the topics selected to illustrate the overarching topic of change, tolerance of ambiguity, and mindfulness. The participants in the study were from different institutions. The instruments in the study focus on the perception of the individual, and their inclination (or disinclination) toward resistance to change and ambiguity in a general way, as well as their level of mindfulness. Change or fluctuation at each institution was not considered or compared, and the imposed changes individuals faced at their institutions might have been different. Knowledge of cultural and contextual factors may help to design future studies in the identification of the socio-structural determinants of attitudes toward resistance, tolerance of ambiguity, and mindfulness, and how these factors act as a hindrance toward change acceptance. Additionally, we did not define the level of change, such as first-order or second-order change. The assumption made by the authors is that second-order change would provoke a stronger negative response toward change amongst individuals who are more likely to resist change, but exploration of this factor is for another study.

DISCUSSION AND CONCLUSION

Higher education environments are complex and bursting with moments of uncertainty. Change events cause episodes of cognitive dissonance and resistance in employees struggling with low tolerance of ambiguity. Employees must be flexible and become adaptable to changing environments and demographics, internal and external influences, changes in management, shrinking budgets, and updates for new laws and governing bodies.

Overall, participants in the survey were considered resistant to change (mean = 5.66). There was a perfectly negative correlation found in the mean between tolerance of ambiguity and resistance to change, indicating individuals with a high intolerance of ambiguity were more likely to be resistant to change.

The individual higher education employee needs to evolve along with essential change, adapting to the new methods and environment. In this study, a correlation between tolerance for ambiguity and cognitive rigidity was not found. This non-finding might indicate evidence of evolution, where the individual prefers less ambiguity and may even resist change, but realizes the inevitability of change and still needs to learn new methods due to change.

The participants were similar to the extent they are in a higher education environment, although they are not necessarily in the same situation. This study considers working at a higher education institution as a generalized environment, rather than a group of participants facing a specific situation and reacting to it. However, it is also possible the responses in our study are indicative of higher education employees in general, as the testing for the original scale by Oreg (2003) of 47 higher education faculty considering their use of course web sites reveals remarkably similar RTC mean and subscale mean scores to our study, as shown in the table below.

Table 6. Comparison of current study to Oreg's study (2003)

Scales	Oreg (2003) HE faculty survey (n=47)	Standard Deviation	Current study HE faculty, staff, administrators (n=38)	Standard Deviation
RTC_M	3.0	0.51	3.02	0.56
RTC_RS	2.63	0.65	2.67	0.67
RTC_ER	3.28	0.75	3.19	0.90
RTC_STF	2.77	0.79	2.80	0.80
RTC_CR	3.42	.075	3.51	0.72

In general, institutions need to consider new approaches to change in order to survive in the current higher education environment. Higher education leaders, as change agents planning a change event, must consider the promotion of a new mindset for their employees (de Vries, Ramo, & Korotov, 2009). Consideration of the staff and faculty is of high importance, yet often overlooked as institutional leaders seek to change and move from idea to implementation in the most expeditious manner. Successful change is more likely to occur when employees are also willing to change, and knowing the underlying psychometric conditions should give pause to leaders during implementation.

It is unclear if employees possessing intolerance for ambiguity seek positions in a less ambiguous environment. Oreg and Nevo (2009) found a correlation between which job types or career individuals choose and the environment of change associated with the position. In the past, many higher education institutions were perceived as representing a more secure and certain environment. This reputation is no longer fitting, and the individuals living in this current atmosphere may choose to adapt, resist, or move on. Similar to the conclusions reached by Sydow, & Schreyogg, & Koch (2009), higher education is faced with a paradox; the people and systems which have sustained the inertial processes in the past struggle with necessary adaptations due to uncertainty and fear. Reacting to resistance in a climate of ambiguity can cause difficulty even for change initiatives necessary for institutional survival.

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