

Readiness for Change in Public Accounting Firms

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The accounting profession continually faces the dynamics of change. Changes such as globalization and growth in technology have significant impact; however, prior research on change in the profession has been limited. This study examined individual attitudes toward change as an indication of employee readiness. The paper presents the findings of an empirical study using the Attitudes toward Change Instrument. The instrument explores cognitive, affective, and behavioral attitudes toward change. A quantitative survey was conducted within a multi-national accounting firm and included audit staff from member firms in Australia, Canada, and the United States. The findings indicate individuals, particularly at the leadership level, have a positive attitude toward change.

Keywords: attitudes toward change, change readiness, public accounting

INTRODUCTION

Modern organizations must face the inevitability of change, which occurs at a rapid pace (Domergue, 2020; Lattuch & Young, 2011; Shah & Shah, 2010). Many dynamics cause this turbulent environment. Two primary factors are globalization and technological developments (Baskerville & Hay, 2010; Rafferty et al., 2013; Sarkar et al., 2021). Johnson and Scholes (as cited in Jamali et al., 2009) categorized the litany of changes using the acronym of PEST – political, economic, socio-cultural, and technological dynamics (see also Khalifé & de Montmorillon, 2021). Because of the relentless pace of change, organizations must adapt (Jamali et al., 2009; Rafferty et al., 2013) and build a capacity for change (Kerber & Buono, 2005) if they are to remain competitive.

The accounting profession is not immune to the forces of change, and so public accounting firms (CPA firms or firms) must also adapt to remain competitive. Due to the globalization of the business environment (Albrecht & Sack, 2000; Tarigan & Devie, 2012), many corporations became multi-national in scope. In response, a number of CPA firms developed global networks to allow for greater understanding of clients' global business environment as a means to improving the audit quality of services provided (Carson, 2009). Jones and Norman (2006) highlighted the increased emphasis on risk assessment for CPA firms. The assessment includes the audit risk of providing an appropriate opinion in the audit report (PCAOB, 2010a), and that risk is greater when working with clients engaged in complex operations in numerous markets around the globe (Albrecht & Sack, 2000). The disruptive effect (Richardson & Watson, 2021) of information technology advances has added a different set of challenges for CPA firms (Asuquo et al., 2020). As organizations increasingly use electronic resources for data creation, analysis, security, and storage (AACSB, 2018), CPA firms need to ensure staff members have the skills and tools to understand the information systems and gather sufficient, appropriate audit evidence (PCAOB, 2010b). The effect of

these forces on CPA firms and the clients they serve has created an environment that causes firms to confront the dimensions of change.

Managing change is a critical element for organizations (Madsen, 2003), although Cohen (2000) cautioned a universal formula for change does not exist. Change efforts frequently fail (Choi & Ruona, 2011; Self & Schraeder, 2009), and this is often due to attempts for a quick fix or a temporary solution (Weeks, et al., 2004). Madsen et al. (2005) highlighted the need for organizations to embrace a constant state of change. It is through a process of continual adjustment, Sackmann et al. (2009) argued, that organizations succeed. Armenakis and Harris (2002) identified employee readiness for change as the first phase of the change process, and Holt et al. (2008) stressed the importance of readiness for system-wide change. Employee preparation and readiness is necessary for change to occur, which is why Madsen et al. (2006) identified an increase in employee readiness for change as one of the key activities for effective change.

Despite the importance of change readiness in the accounting profession, prior research on this topic within the profession has been limited. For example, when considering the U.S. adoption of international standards, an emphasis is frequently placed on the role of accounting education within colleges and universities, not CPA firms (Bloch et al., 2012; McPeak et al., 2012; Mintz, 2010). A number of studies have focused on readiness for change; however, researchers highlight the need for additional research on the topic (Madsen et al., 2006; Rafferty et al., 2013). This study brings particular relevance through a focus on change readiness within an industry facing continual pressures for change. Limited research has been conducted on change readiness within CPA firms, and research to date has addressed narrow dimensions of the concept. The current study represents the first broad-based empirical study of individual change readiness within the accounting profession by exploring two questions. First, what are employees' cognitive, affective, and behavioral attitudes toward change? Second, to what degree do firm members' attitudes toward change differ based on age, gender, level of responsibility within the firm, and firm nationality? The results of the study support ongoing dialogue regarding change within the accounting profession and form a basis for further studies using both quantitative and qualitative methodologies.

The rest of the paper proceeds as follows. A literature review of organizational change, including readiness for change, is presented in the next section. The research methodology and results are then presented followed by a discussion of the results. The paper concludes with a consideration of research limitations and proposals for future research on the topic of change readiness.

LITERATURE REVIEW

Organizational Change

Organizational change, according to Weeks et al. (2004), consists of the processes by which elements such as organizational structures, strategies, cultures, and processes are broken down and replaced. Organizations are often defined as being in a continual state of change (Lattuch & Young, 2011; Madsen et al., 2005), although the low success rate of change efforts presents a challenge for organizations (Choi & Ruona, 2011; Kerber & Buono, 2005). Armenakis and Harris (2002) delineated three phases of change: the initial readiness for change, a period of adoption, and institutionalization of the changes. Readiness represents the first phase in many change models (Madsen, 2003) and given the low success rate, it has been identified as a key to the realization of successful organizational change (Rafferty & Simons, 2006).

Readiness for Change

Researchers frequently cite the description of readiness offered by Armenakis et al. (1993), who stated readiness derives from "organizational members' beliefs, attitudes, and intentions regarding the extent to which changes are needed and the organization's capacity to successfully make those changes" (p. 681). The authors regarded readiness as a precursor to behaviors in support of change or resistance to the change effort. They recommended the approach to change should be driven in part by the urgency of the change, particularly when the change will be fundamental to the organization rather than an incremental approach. Kotter (2000) reviewed the failure of fundamental change efforts and found many failures occurred in the

first phase of the change process due to a lack of urgency. He therefore advocated for managers to create a sense of urgency. Holt et al. (2007) found readiness to be one of the most important factors for generating employee support for change initiatives. Consistent with Kotter, they found organizations often approach change efforts purposefully, and they also advocated a state of urgency.

Over a several year period, Armenakis collaborated with other researchers to develop a framework for change readiness resulting in a set of five factors first proposed by Armenakis, Harris and Feild (1999). The first factor is discrepancy, which represents the gap between the current and ideal state, leading to employee belief in the need for change. Managers can frame the need for change in an external context, such as changing economic conditions or new regulations, or an internal context, such as productivity standards. The second factor is efficacy, representing the individual's confidence in their and the organization's ability to implement change. The third factor is appropriateness or organizational valence. This relates to employee confidence that the planned change meets the identified need (discrepancy). The fourth factor is principal support, signifying the belief that organizational leaders and other key change agents support the change effort and are committed to its success. The fifth factor is personal valence, defined as the perceived personal benefit the employee expects to realize from the change. The five factors are deemed "crucial to the ultimate success of any organizational change" (Armenakis, Harris, Cole, et al., 1999, p. 279) and should be considered within organizations.

Employee Perceptions

Armenakis et al. (1993) viewed change readiness in terms of individuals' beliefs and attitudes, which represent their perceptions of the change process (Weber & Weber, 2001). In a study conducted in 2000, Eby et al. examined employee perceptions and found attitudes toward change were grounded in perceptions of the work environment. They noted, "readiness for change is conceptualized in terms of an individual's perception of a specific facet of [their] work environment – the extent to which the organization is perceived to be ready to take on large-scale change" (p. 422). Since perceptions are important for individual readiness for change, the authors used an empirical study to identify variables within the work environment related to employee perceptions. The three variable groupings they examined were individual attitudes and preferences, representing personal experiences, work group and job attitudes, and contextual variables at the organizational level, which included firm policies and practices. By addressing key factors of the work environment, organizations can increase employee confidence in the change process and improve employee perception of the organization's readiness for change.

Other studies explored additional factors affecting employee perceptions of the workplace. Prior research found openness to organizational change to be critical for creating employee readiness for change (Madsen et al., 2005; Wanberg & Banas, 2000). Chonko et al. (2002) proposed employee perceptions were driven externally by environmental turbulence and internally by organizational culture, climate, and policies. They followed Armenakis et al. (1993) by calling for a proactive approach to change readiness, and they argued organizations could use culture, climate, and policies to maintain a continual state of change readiness. An empirical study by Madsen et al. (2005) associated organizational commitment and social relationships with readiness for change. Organizational commitment consists of employee attitudes and feelings toward the organization, which in turn affects attitudes and beliefs regarding the organization's ability to pursue change. Social relationships are the attitudes, feelings, and perceptions toward workplace colleagues, which are manifested in communication and involvement within the organization. The finding on workplace relationships was consistent with earlier research of Eby et al. (2000) regarding peer relationships and trust.

Studies by Rafferty and Griffin (2006) and Jones et al. (2008) highlighted the effect of leadership behavior on employee attitudes. Rafferty and Griffin identified three influencing factors on employee perceptions: The frequency of change, the impact of the change initiative, and the planning involved for the change process. Change that occurs frequently leads to impressions of unpredictability, which results in employee anxiety. The impact of change can be incremental or transformative. Transformative change affects the core systems of an organization and has a greater impact on values, structure, and strategy. The third influencing factor, planning for change, was found to enhance the well-being of employees. Rafferty

and Griffin noted these factors could positively or negatively impact the degree of uncertainty, which in turn related to job satisfaction and turnover intentions. Jones et al. (2008) focused their study on the impact of organizational levels on change perceptions. They identified differences between executive, supervisory, and non-supervisory employees. All three groups raised change-related issues of uncertainty and the need for planning, although the emphases differed between hierarchical levels. In both studies, supportive leadership had a strong bearing on employees' attitudes toward change. This element has significance for the current study.

Lattuch and Young (2011) explored the effect of the above influencing factors (frequency of change, magnitude of the change, and the extent of planning) on young professionals' perceptions of change. The study affirmed the impact of supportive leadership on all three of the change perceptions. In contrast to the findings of Rafferty and Griffin (2006), the authors found a positive correlation between job satisfaction and the variables of frequency of change and the magnitude of change. They attributed the results to the characteristics of young professionals, which in their study consisted of workers born between 1975 and 1985. Professionals in this age group "grew up during a time where globalization forced organizations to continuously rethink their business models and technological advancements (e.g. information technology) led to rapid and frequent changes in employees' work life" (Lattuch & Young, 2011, p. 618). As a result, young workers conceivably view change events as opportunities for growth and advancement. An openness to change by young professionals could be particularly relevant for structures, such as accounting firms, demonstrating clear demographic hierarchies.

Multidimensional Attitudes Toward Change

Piderit (2000) used prior research to reveal three dimensions regarding employee responses to change. Cognitive, emotional, and behavioral dimensions in total comprise employee attitudes. The author noted the dimensions overlap each other but also diverge. A multidimensional view encompassing all three reactions allows a deeper understanding of employee readiness. The cognitive element refers to employee beliefs about change. Jones et al. (2008) described the cognitive reaction as how one thinks about change, and Oreg et al. (2011) defined it as the individual's assessment or evaluation of change and cited the work of Bartunek, Rousseau, Rudolph, and DePalma, who labeled the concept as sense making. The dimension of emotion, according to Piderit, refers to employee feelings toward change. Oreg et al. (2011) defined the emotional dimension as an affective reaction and noted affections could be negative (stress) or positive (pleasantness). The behavioral, or intentional, dimension represents employees' actions in response to change. Piderit distinguished between past behavior and future intentions, stating employee readiness for a change event would draw upon the intentional aspect. Piderit believed the perspective of multidimensional attitudes broadened the understanding of employee reactions. The author recognized that competing perspectives could lead to ambivalence. For example, an individual might display a cognitive understanding of the need for change while also harboring negative feelings about what will occur. The multidimensional viewpoint provides a richer context for envisioning how employees will respond to change and could facilitate accurate predictions of employee attitudes. The dimensions presented here comprise the three elements of the survey instrument used in the current study.

Resistance to Change

Change efforts often fail, and research has frequently cited employee resistance to change as a primary barrier to change (Choi & Ruona, 2011; Ford & Ford, 2009). Armenakis et al. (1993) regarded change readiness as "the cognitive precursor to the behaviors of either resistance to, or support for, a change effort" (p. 682). Consistent with Armenakis et al. (1993), Bouckennooghe (2010) observed the phrase *attitude toward change* often addressed multiple aspects of employee responses including resistance, readiness, cynicism, openness, acceptance, commitment, and adjustment. Such responses could be expressed as a negative attitude representing resistance or a positive attitude supporting the change initiative (Piderit, 2000). Researchers have often categorized resistance through an emotional or affective dimension such as fear of change or uncertainty (Madsen, 2003; Price & Chahal, 2006). Bouckennooghe's extensive review of the change literature found the prevalent definition of resistance to be rooted in the intentional/behavioral

dimension by which employees seek to maintain the status quo and block the successful implementation of change.

However resistance is defined, it represents only one of the attitudinal responses to change initiatives. As Ford and Ford (2009) suggested, managers should stop blaming resistance as a barrier to progress and instead embrace it as a valuable resource for implementing change. Piderit (2000) stated the multidimensional nature of employee attitudes often results in ambivalence, which could have desirable or undesirable consequences. The author posited organizations might actually encourage and plan for dissent as a means of generating disagreement and dialogue. Such debate can lead to the development of knowledge and foster learning. Hirschhorn (2000) went as far as proposing the use of a “virtual” crisis as a means of overcoming inertia and transforming personal urgency to the organizational level.

Ford et al. (2008) cautioned against isolating the perceived resistance of change recipients from the actions or inactions of the change agents. They stated resistance could represent a thoughtful consideration of the change activity, which is a cognitive process of sense making, as well as a behavioral response to the actions or inactions of the change agent. Rather than treating recipients’ reactions as an obstacle or liability, the authors stated the reactions “can have value for the existence, engagement, and strength of a change, serving as an asset and a resource in its implementation and successful accomplishment” (p. 368). The existence value derives from sparking new conversations and fostering existing dialogue. Ford et al. (2008) expressed fear that blind acceptance could be a sign of disengagement, while expressions of resistance provide feedback and thoughtful engagement. The strengthening value of resistance derives from resistance as a source of conflict. Citing research regarding conflict as a means of strengthening the quality of decisions and commitments to decisions, the authors find similar benefit in resistance to change. Functional conflict contributes to the change and the implementation process. Ford et al. concluded by noting the mere threat of resistance might cause change agents to adopt strategies that serve to improve the change process. These strategies include extensive communication, invitations for participation, provision of necessary resources, and development of working relationships.

Lewin’s Model of Change Process

Much of the research on change readiness and resistance to change stems from the foundational work of Kurt Lewin. Lewin (1947) developed a model for the change process in human systems consisting of a three-step process of unfreezing, moving, and freezing (often referred to as unfreezing – changing – refreezing). Schein (1995) described the model as “a theoretical foundation upon which change theory could be built solidly” (p. 2). Burke (2008) described unfreezing as a process of creating motivation and readiness for change; changing as behavioral progression toward the new goal; and refreezing as an integration of the change into the organization’s operations and structure. Although Burke placed an emphasis on behavior in the second stage, Mukhtar and Fook (2020) highlighted the first stage of unfreezing whereby the appropriate conditions are created to support change initiatives. Schein (2008) noted the overall model called for changes in beliefs and attitude as well as behavior.

To initiate the change process, Lewin (1947) observed it was “sometimes necessary to bring about deliberately an emotional stir-up” (p. 35). This logic is consistent with the proposals of Piderit (2000) to encourage dissent and Hirschhorn (2000) to consider a virtual crisis. Many studies have focused on the unfreezing phase as the start of a change initiative (Choi & Ruona, 2011; Chonko et al., 2002; Holt et al., 2007; Kerber & Buono, 2005; Madsen, 2003). Madsen (2003) stressed the need to unfreeze behaviors or thinking to increase the likelihood of successful change.

Lewin’s model was relevant for organizational planned change (Burke, 2008; Price & Chahal, 2006). Organizations begin by unfreezing current processes before implementing change and refreezing in a different state. Weick (2000) supported the model and stated it represented a complete theory of change. He observed the process of unfreezing, changing, and refreezing steps were appropriate for planned change. However, he cautioned that for continuous or emergent change, the situation might be different. Organizations operating in a state of continual change are already unfrozen and attempting to unfreeze dynamic processes could be disruptive. Weick posited an application in such situations might be freezing

the current state, rebalancing, and unfreezing again. His primary message was consistent with Lewin and other researchers in presenting a deliberate process for implementation of change.

RESEARCH METHODOLOGY AND RESULTS

The research design used a positivist research philosophy in which change readiness was measured in a CPA firm. Positivist research places an emphasis on objectivity (McNeill & Chapman, 2005). The study applied a non-experimental, quantitative approach. Change readiness, to the extent it is present, exists at the individual level of organizations.

Survey Instrument and Sample

The Attitudes toward Change Instrument, first presented at an Academy of Management conference, measured individual change readiness (Dunham et al., 1989). The authors developed the instrument for purposes of measuring employees' attitudes toward organizational change. The 18-item instrument examines cognitive, affective, and behavioral change tendencies. The cognitive dimension represents an individual's opinion or belief regarding the information they possess regarding a change prospect. The affective dimension embodies an individual's feelings toward change, whether they are supportive or anxious. The behavioral dimension represents the actions taken or to be taken for or against change (Rashid et al., 2004). A 6-point response scale ranging from 1 (strongly disagree) to 6 (strongly agree) was employed for this study. Scores within each of the three subscales were averaged to yield means in addition to the overall score, which measured individuals' attitude toward change.

The survey's authors conducted an initial validation of the instrument through an evaluation of a nomological network. The authors concluded, "in general, the attitude toward change measure behaves as expected" (Dunham et al., 1989, p. 10). Ary et al. (2002) stated one threat to validity to test scores is construct underrepresentation. The Attitude toward Change Instrument examines the cognitive, affective, and behavioral dimensions of change readiness, which are consistent with the work of Piderit (2000). Piderit posited, "finding a way to bring together these varying emphases should deepen our understanding of how employees respond to proposed organizational changes" (p. 785). By addressing the three elements of change readiness, the instrument provides appropriate construct representation. The instrument has been used successfully in several studies covering a range of applications, which provides an indication of content validity. Reliability refers to the consistency of a test measure. Internal consistency is frequently determined through Cronbach's coefficient alpha (Muijs, 2011). A coefficient alpha greater than .70 represents an acceptable indicator of reliability (Sweet & Grace-Martin, 2012). Prior surveys have regularly yielded alphas above this figure. The original study had a coefficient alpha of .88. Subsequent studies included coefficients of .92 (Elias, 2009), .84 (Haque, 2008), .89 (Rashid et al., 2004), .89 (Yoldas, 2019), and .77 (Yousef, 2000). These results demonstrate the reliability of the survey instrument.

The sample for the study was drawn from members of the audit staff of a large, multi-national CPA firm serving clients in over 100 countries. The international firm is a formulation of member firms from the various countries. For control purposes, the focus of the study was on the audit staff. The targeted sample consisted of four member firms: Australia, Canada, the United Kingdom, and the United States (U.S.). The United Kingdom did not respond to requests for participation, so the distribution of the survey was narrowed to Australia, Canada, and the U.S. The member firms were all English speaking, which eliminated the need for survey translations. The international component offered an important element to the study to the extent non-U.S. audit practices and employee training function under a different structure than U.S. practices.

The survey was distributed electronically to all audit staff members of the three member firms and was monitored for a sufficient response. The strategic learning group of the firm assisted in follow-up prompts as necessary to ensure adequate counts from each of the firms. For correlation studies, Ary et al. (2002) stated the existence of relationships should be evident with moderate sample sizes of 50-100. The number of audit staff within the member firms was several thousand, and a sufficient response rate was achieved.

Methodological Assumptions

Key aspects for a quantitative study are the internal validity of the research process, consisting of the control over surrounding variables, and external validity, which is the generalizability of the research.

One consideration surrounding internal validity is the current accounting environment for organizations and CPA firms. Accounting professionals' heightened sense of the need for change could have affected the current study on change readiness. Ideally, a baseline of accounting professionals' attitude toward change would be available. It was difficult to control for this threat, although comparative data between several offices of the CPA firm and between U.S. and international member firms could provide an indication of skewed responses. A second consideration for internal validity consists of the nature of the participant pool. All participants were well-educated business professionals who are familiar with survey activity, such as educational course evaluations and seminar feedback, so they were likely to have provided appropriate feedback on the survey instruments. A third consideration is the reliability of the survey instrument. As discussed above, the instrument has been reviewed and tested for validity and reliability. A fourth consideration affecting control of the study would be selection bias in the sample. Inclusion of three large member firms of a CPA firm improved the representativeness of the sample, and involvement of non-U.S. offices helped to protect the narrowness of a U.S.-only survey.

External validation relates to the generalizability of the study. Does the sample represent the larger population? One issue is whether a sample selection based on several member firms of the organization offers an adequate representation within the CPA firm. However, a threat in this area is the limited focus on a single CPA firm. Inclusion of other CPA firms might yield different results, particularly with regard to large firms with significant training capabilities and strategic learning groups versus the numerous small firms who are not able to provide such structured support. Accounting professionals working in corporate settings might also have a different perspective. A final issue for the generalizability of the study entails the appropriateness of the definitions and testing procedures. The constructs of change readiness have received much attention by researchers, and the survey instrument has been used on many occasions and in many different contexts. Therefore, the elements included in the study do not appear to pose a threat to the representative nature of the study.

Data Processing and Analysis

Data received was electronically transferred to Statistical Package for the Social Sciences (SPSS) for analysis. Descriptive statistics were compiled on the survey participants' demographics. One-way analysis of variance (ANOVA) was used to analyze the degree to which participant responses change due to multiple demographic characteristics (Field, 2009). The internal consistency reliability of the instrument was assessed through the application of Cronbach's alpha, which is the most widely used measure of reliability (Tavakol & Dennick, 2011). Kline (1999) found scores of .80 to be appropriate for cognitive tests, although ability tests are acceptable for scores of .70. Cronbach's alpha for the Attitude toward Change Instrument was strong at .93. Individual scores for the change instrument sub-scales of cognitive (.89), affective (.85), and behavioral (.78) were also robust.

Descriptive Statistics

The pool of potential participants was 2,300 in the U.S., 1,200 in Canada, and 350 in Australia for a total of 3,850. 310 responses were received; however, 38 responses were unusable due to incomplete data. Therefore, 272 valid responses became part of the survey results. 124 responses were received from Canada (46% of the total), 118 responses came from the U.S. (44%), and 30 responses were from Australia (11%). The overall response rate was 7.1% with the strongest response rate in Canada (10.3%) followed by Australia (8.6%) and the U.S. (5.1%).

The survey asked respondents to provide their experience in the auditing profession. Approximately 31% of responses came from the endpoints of accountants with minimal experience (0-3 years) and many years in the profession (12 years and over). Trailing behind were those with 4-7 years' experience (22.8%) and 8-11 years' experience (15.4%).

Accounting firms have a strict hierarchical structure with entry-level staff members at the base and experienced employees elected to the partnership at the top. It is desirable to assess change readiness throughout the organizational levels. The typical progression is for accountants to begin at the staff level and progress as in-charge/seniors and managers before they are eligible to become partners. The largest response was at the Manager level (38.6%) with a tight range (18.7-21.7%) at the other three levels.

Questions regarding gender and respondent age were optional to provide an additional assurance of anonymity for participants. 256 of 272 participants responded to the question on gender, and 257 responded to the question on age. Gender was closely balanced between male and female (50.4% vs. 49.6%). Age demographics reflect the high number of young professionals within the firm as 43.6% of respondents were 21-30 years old. Other age ranges were 31-40 (27.2%), 41-50 (17.5%), and 52 and over (11.7%).

Examination of the Research Questions

The first research question related to participants’ cognitive, affective, and behavioral attitudes toward change using a 6-point Likert scale with a range from 1 (strongly disagree) to 6 (strongly agree). As illustrated in Table 1, the overall mean for the three dimensions was 4.29 representing positive attitudes regarding change for individuals within the firm. The mean scores for the subscales were 4.16 for the cognitive dimension, 4.27 for the affective dimension, and 4.40 for the behavioral dimension. These scores reflect positive attitudes for each of the subscales.

**TABLE 1
MEANS AND STD. DEVIATIONS FOR THE ATTITUDE TOWARD CHANGE INSTRUMENT**

Change Dimension	Mean	Std. Deviation
Attitude toward Change Instrument	4.29	0.69
Cognitive dimension	4.16	0.80
Affective dimension	4.27	0.75
Behavioral dimension	4.40	0.68

The second research question explored participants’ attitudes toward change based on several different factors. One-way analysis of variance (ANOVA) was performed, and where significant differences were identified, a Tukey’s HSD test was completed to determine where those differences occurred. Tukey’s test is a commonly used test for pairwise comparisons (Sweet & Grace-Martin, 2012). The test provides “good power and tight control over the Type I error rate” (Field, 2009, p. 374). The factors where significant differences were not found were for age and gender.

Attitude Toward Change and Member Firm

Table 2 illustrates attitudes toward change were significantly different at the .05 level based on participants’ member firm (Australia, Canada, or U.S.).

**TABLE 2
ONE-WAY ANOVA FOR INDIVIDUAL ATTITUDES TOWARD CHANGE AND PARTICIPANT MEMBER FIRM**

	Sum of squares	df	Mean square	F	Sig.
Between Groups	3.154	2	1.577	3.341	.037
Within Groups	122.727	260	.472		
Total	125.882	262			

Table 3 demonstrates the difference occurred between Canada and the U.S. with a significance of .028. The highest mean of 4.41 appeared in Canada and the lowest mean of 4.18 occurred in the U.S. This difference will be discussed further in the next section.

**TABLE 3
TUKEY'S HSD TEST FOR INDIVIDUAL ATTITUDES TOWARD CHANGE AND
PARTICIPANT MEMBER FIRM**

	(I) Member Firm location:	(J) Member Firm location:	Mean difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Tukey HSD	Australia	Canada	-.12740	.14060	.637	-.4588	.2040
		United States	.10517	.14072	.735	-.2265	.4369
	Canada	Australia	.12740	.14060	.637	-.2040	.4588
		United States	.23527*	.09002	.028	.0204	.4448
	United States	Australia	-.10517	.14072	.735	-.4369	.2265
		Canada	-.23257*	.09002	.028	-.4448	-.0204

*The mean difference is significant at the 0.05 level.

Attitude Toward Change and Level Within the Firm

Table 4 demonstrates attitudes toward change were significantly different at the .05 level based on participants' level within the firm (staff, in-charge/senior, manager, or partner).

**TABLE 4
ONE-WAY ANOVA FOR INDIVIDUAL ATTITUDES TOWARD CHANGE AND
PARTICIPANT LEVEL WITHIN THE FIRM**

	Sum of squares	df	Mean square	F	Sig.
Between Groups	8.228	3	2.743	6.038	.001
Within Groups	117.653	259	.454		
Total	125.882	262			

Table 5 shows differences occurred between partners and managers (sig .027) and partners and in-charge/seniors (sig .000). The highest mean, reflecting a positive attitude toward change, happened at the partner level (4.61) followed by staff (4.30), managers (4.28), and in-charge/seniors (4.05). The high score at the partner level could have particular relevance for the accounting profession and will be discussed further in the next section.

TABLE 5
TUKEY'S HSD TEST FOR INDIVIDUAL ATTITUDES TOWARD CHANGE AND PARTICIPANT LEVEL WITHIN THE FIRM

	(I) Your audit role:	(J) Your audit role:	Mean difference	Std. Error	Sig.	95% Confidence Interval	
			(I-J)			Lower Bound	Upper Bound
Tukey HSD	Partner	Manager	.33367*	.11846	.027	.0274	.6400
		In-charge /Senior	.56198*	.13228	.000	.2199	.9040
		Staff	.31733	.13445	.088	-.0303	.6650
	Manager	Partner	-.33367*	.11846	.027	-.6400	-.0274
		In-charge /Senior	.22830	.11045	.167	-.0573	.5139
		Staff	-.01634	.11305	.999	-.3087	.2760
	In-charge/Senior	Partner	-.56198*	.13228	.000	-.9040	-.2199
		Manager	-.22830	.11045	.167	-.5139	.0573
		Staff	-.24464	.12745	.222	-.5742	.0849
	Staff	Partner	-.31733	.13445	.088	-.6650	.0303
		Manager	.01634	.11305	.999	-.2760	.3087
		In-charge /Senior	.24464	.12745	.222	-.0849	.5742

*The mean difference is significant at the 0.05 level.

Attitude Toward Change and Years of Experience

Table 6 displays the results showing attitudes toward were significantly different at the .05 level based on participants' years of experience in the profession.

TABLE 6
ONE-WAY ANOVA FOR INDIVIDUAL ATTITUDES TOWARD CHANGE AND PARTICIPANT YEARS OF EXPERIENCE

	Sum of squares	df	Mean square	F	Sig.
Between Groups	4.103	3	1.368	2.909	.035
Within Groups	121.778	259	.470		
Total	125.882	262			

Table 7 demonstrates a significant difference between 4-7 years of experience and 12 years and over (sig .019). The means between these two levels ranged from a high of 4.46 for 12 and over years of experience to 4.12 for 4-7 years of experience. To some degree, the high score for an experience level of 12 and over years mirrors the results above for partners in the firm, as will be discussed in the next section.

TABLE 7
TUKEY'S HSD TEST FOR INDIVIDUAL ATTITUDES TOWARD CHANGE AND PARTICIPANT YEARS OF EXPERIENCE

	(I) Years of audit experience:	(J) Years of audit experience:	Mean difference	Std. Error	Sig.	95% Confidence Interval	
						(I-J)	Lower Bound
Tukey HSD	0-3 years	4-7	.15876	.11571	.518	-.1404	.4580
		8-11	-.01401	.13038	1.000	-.3512	.3231
		12 and over	-.18363	.10878	.332	-.4649	.0976
	4-7	0-3 years	-.15876	.11571	.518	-.4580	.1404
		8-11	-.17277	.13703	.589	-.5271	.1816
		12 and over	-.34239*	.11667	.019	-.6441	-.0407
	8-11	0-3 years	.01401	.13038	1.000	-.3231	.3512
		4-7	.17277	.13703	.589	-.1816	.5271
		12 and over	-.16962	.13124	.569	-.5090	.1697
	12 and over	0-3 years	.18363	.10878	.332	-.0976	.4649
		4-7	.34239*	.11667	.019	.0407	.6441
		8-11	.16962	.13124	.569	-.1697	.5090

*The mean difference is significant at the 0.05 level.

Summary

The overall mean for the Attitude toward Change Instrument was 4.29 on a 6-point Likert scale, which represents a positive attitude toward change. For the demographic data in the survey, ANOVA testing yielded several statistically significant results. Detail of the findings will be discussed next.

DISCUSSION

This study examined individual change readiness within CPA firms. The research helps to fill a void of empirical research in the accounting profession. The knowledge is important as the profession continues on a dynamic path of addressing globalization and confronting disruptive technologies. The survey yielded results regarding individual attitudes toward change consistent with previous studies using the same survey instrument. This demonstrates that attitudes and perceptions within the accounting profession, as represented by a study with a large CPA firm, are consistent with results from numerous other environments. A number of conclusions emerged from the study and will be presented in the context of the research questions.

The first research question addressed participants' cognitive, affective, and behavioral attitudes toward change. The highest subscale was a mean of 4.40 for the behavioral dimension. Survey questions in this category reflected an action orientation to embrace new ideas, suggest new approaches, and do all that is possible to support change. It appears that individuals are willing to act on change activity when it occurs, which is a desirable state. The cognitive and affective elements of change are important as well. Successful change begins with a state of readiness, and changing individual cognitions are at the core of the change process (Armenakis et al., 1993). Individuals must have the cognitive awareness of the discrepancy between the present state and desired end-state. Further, the awareness should lead to affective responses that view change in a positive light. The lowest subscale, relative to the other two scores, was the cognitive dimension with a mean of 4.16. This dimension represented a cognition regarding change and the effects of a change process. Questions in the subscale addressed participants' beliefs regarding the benefits of change for themselves, their coworkers, and the organization. Respondents were supportive of change, and they

displayed a willingness to act on change measures even if they were slightly less certain about the benefits of change processes.

The second research question addressed demographic dynamics regarding change readiness. A significant relationship was found between attitudes toward change and firm nationality (Sig.=.037). Specifically, the significance occurred between Canada and the U.S. A Tukey HSD Test revealed a mean score of 4.41 for participants from the Canadian member firm and 4.18 for participants from the U.S. Members of the Canadian firm demonstrated a more positive attitude toward change than did members of the U.S. firm. The higher scores in Canada might be tied to operational or leadership dynamics in the Canadian member firm. These factors could be explored further by the participating firm or through future qualitative research for the industry at large.

In terms of participants' professional status and personal characteristics, significance was found for their level within the firm and years of audit experience. The significant relationship for level within the firm happened between partners of the firm and in-charge/seniors as well as partners and managers. The Tukey mean score for partners was 4.61, which was the highest observed score throughout the analysis. Regarding years of audit experience, the significant relationship occurred between participants with 12 or more years of experience and those with 4-7 years of experience. Given the normal progression of audit staff within a CPA firm, individuals with 12 or more years of experience are often partners in the firm, while individuals with 4-7 years of experience are commonly at the level of in-charge/seniors or managers. Predicting the attitudes of the audit partners and/or those with many years of experience, which are likely to be overlapping categories, was difficult. For example, would partners, as joint owners of the firm, be confident in their status and support change activities or would they be protective of the status quo and have negative attitudes toward change? The absolute results and comparative scores to mid-level managers suggest partners are receptive to changes in the profession and the firm. The positive scores could be an indication that the most experienced audit staff have acclimated to an environment of change through their years in the profession and have accepted change as part of the profession's advancement. Their leadership represents an important factor for the process of managing change within the firm (Jones et al., 2008; Lattuch & Young, 2011). Leadership in the firm appears to be positioned well for the change that continues to occur, and the positive test results also demonstrate a readiness for change among other members of the firm.

LIMITATIONS AND FUTURE RESEARCH

This research consisted of a quantitative study of a large, multinational CPA firm and is subject to various limitations. The sample consisted of the audit staff from three English-speaking member firms of a multi-national CPA firm. The results may not be generalizable to other member firms within the organization, other CPA firms, or to accounting staff employed in private industry. All of these environments present opportunities for further study. A single CPA firm was utilized for the study, and the survey was conducted in collaboration with the firm's strategic learning group. Although the group's support might have helped to increase participant response rates, it is possible the group's assistance resulted in some response bias. Broader representation in the accounting industry could yield different results.

All three member firms are English speaking and, more significantly, the firms are culturally similar, according to the influential GLOBE study of 62 societies (House et al., 2004). Conclusions regarding change readiness for these member firms of the Anglo region might not be reflective of results from other cultural regions. An expansion of the research would be to conduct the study in member firms chosen from other regional clusters.

Another direction to extend the research is to mid-tier and small-tier accounting firms in the U.S. Regional and local firms might differ from the large firms in a number of respects. First, their international dimension, if it exists at all, will be significantly less than multi-national firms. Second, by virtue of their smaller size, employee attitudes might reflect different dynamics than in the large firms. Third, smaller

firms might have fewer resources devoted, and different approaches, to staff training, which could affect change readiness.

The stated dynamics of multinationalism and technological changes do not only affect CPA firms. As a result, accounting professionals working in private industry also face the changes that would occur from the convergence process. A meaningful study, therefore, would be to assess the change readiness of accounting staff in private industry.

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