

SCHOOL CULTURE AND TEACHER CHANGE FATIGUE IN TENNESSEE

By

Erin E. Leuschke

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Thesis Committee:

Dr. Patrick McCarthy, Chair

Dr. Michael Hein

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ABSTRACT

Persistent organizational change is a reality for workers across the globe. Change fatigue, a response to the perception that too much change is occurring, is one conceptualization of the detrimental effects that change can have on individuals. While no one sector can claim a monopoly on change, the public education system in the United States is especially vulnerable to a barrage of reform efforts. Using a sample of over 700 public school educators in Tennessee, this research explores the correlations between educator change fatigue and four school culture-types, as well as the relationship of change fatigue to emotional exhaustion, turnover intentions, and organizational commitment among educators. This research also addresses the role of person-organization fit in mediating the relationship between school culture and teacher change fatigue.

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CHAPTER I: INTRODUCTION

Persistent organizational change is a reality for workers across the globe. While aggressive, strategic change can provide organizations with a competitive advantage (Ferrier, Smith, & Grimm, 1999), the stress of continuously shifting environments is often hard on employees (Hansson, Vingard, Arnetz, & Anderzen, 2008; Hart, 2009). Change fatigue, a response to the perception that too much change is occurring (Berneth, Walker, & Harris, 2011), is one conceptualization of the detrimental effects that change can have on individuals. Change fatigue is akin to job burnout, a syndrome characterized by emotional exhaustion, depersonalization, and reduced accomplishments on the job (Maslach, Schaufeli, & Leiter, 2001). Like burnout, emotional exhaustion is a primary symptom of change fatigue. Other symptoms include reduced organizational commitment and increased turnover intentions (Berneth et al., 2011; Perel, 2015). Change fatigue is distinguished from job burnout because such responses are specifically caused by persistent, layered, or otherwise extensive change within an organization (Stensaker, Falkenberg, Meyer, & Haueng, 2002).

While no one sector can claim a monopoly on change, the public education system in the United States is especially vulnerable to a barrage of reform efforts. Because the priorities of public education are set by elected officials, it is by necessity that teachers and administrators must adjust periodically as new leaders are elected (Zeehandelaar & Griffith, 2015). Exacerbating this rate of change are the multiple levels of authority to which schools are accountable. Federal, state, and local entities all have the power to regulate changes inside public schools. Additionally, school-level autonomy

grants individual administrators the authority to implement changes as they see fit. All of these change agents are responsible to different stakeholders and have varying perspectives on the most effective and appropriate means of educating the country's children and youth. These political influences, as well as emerging innovations and trends in teaching methodology, result in an education system that often swings from fad to fad in the pursuit of quick improvement to student performance (Good & Lavigne, 2015).

For teachers, the dispersion of power and the influence of trend-based teaching methodologies means that change is persistent, that they are bound to the implementation of multiple, simultaneous initiatives, and that poor coordination between authorities can result in initiatives with conflicting priorities (Stauffer & Mason, 2013). One study found that 91% of teachers listed administration, expectations, and accountability procedures of political and educational structures as a significant on-the-job stressor (Stauffer & Mason, 2013).

In addition to the stress caused by school governance, high turnover is another source of instability inside public schools. In 2012, 16% of all public-school educators in the United States left teaching for another profession (i.e., "leavers") or transferred schools (i.e., "movers"). This attrition rate is higher than nursing, and significantly higher than law, engineering, and architecture (Goldring, Taie, & Riddles, 2014; Ingersoll, Merrill, & Stuckey, 2014). From 1988 to 2013, the total percent of teachers leaving the profession entirely (i.e., "leavers") climbed steadily, rising from 6% to 8% annually (U.S. Department of Education, 2015). Turnover among educators places the burden of adjusting to the change on teachers who stay behind. The nature of public education in

the United States, as well as high turnover rates, create an environment where persistent, layered change is a reality with which all teachers and administrators must contend.

Purpose of the Current Study: Person-Organization Fit as a Mediator

The current study contributes to our understanding of change fatigue by exploring the mediating effect of subjective person-organization fit on the relationship between organizational culture and change fatigue. Specifically, the premise of this study is built upon Perel's (2015) findings that a relationship exists between perceived organizational culture and the likelihood that individuals will experience change fatigue. Using Quinn and Rohrbaugh's (1981) Competing Values Framework, Perel (2015) found that employees who described working in group cultures—characterized by supportive employee relations and decentralized decision making—experienced less change fatigue. Conversely, employees who described working in rational cultures—characterized by structure, stability, low levels of trust, and an emphasis on bottom-line results—experienced increased levels of change fatigue. In acknowledgement of the interaction between individual employee characteristics and organizational culture, this research explores how subjective (i.e., perceived) person-organization fit plays a mediating role in the relationship found by Perel between organizational culture and change fatigue. Fundamentally, this is an exploration of the idea that an individual who is well-matched to his or her organization will experience more positive outcomes than an individual who is mismatched. In the context of public schools and change fatigue, this research investigates whether a teacher who is well-matched to his or her school's culture will experience less change fatigue than a teacher whose cultural preferences are at odds with their school's culture.

In addition to exploring the impact of P-O fit, this research offers a unique contribution to the study of change fatigue by being rooted in the experience of public school educators in the United States. As noted above, educators experience change constantly and often have limited influence on decisions that impact their work. While change is certainly not exclusive to educators, the documented prevalence of change within the teaching profession makes the study of change fatigue in this setting especially relevant.

What follows is a summary of the research surrounding change fatigue and person-organization fit. First, a review of change fatigue, its antecedents, and its consequences is offered. Then person-organization fit is examined, including operationalizations, measurement considerations, and consequences of P-O fit.

Change Fatigue, Antecedents, and Consequences

Definitions of change fatigue are inconsistent across the literature, but share similar elements. As previously mentioned, change fatigue is a perception that too much change is taking place (Bernerth et al., 2011). Change fatigue is an individual-level response; it is not used to characterize an entire organization (Elving, Hansma, & De Boer, 2011). Change fatigue is distinguishable from, but related to, several change-based constructs, including change cynicism, change resistance, and psychological uncertainty (Bernerth et al., 2011, Elving et al., 2011; McMillan & Perron, 2013). Change cynicism and change fatigue share a foundation in a negative response toward change as a result of a bad change experiences or lack of trust in the change process (Elving et al., 2011). However, change fatigue is the direct result of too much change, while change cynicism can be spurred by one aversive change event. Change cynicism also tends to result in a

pessimistic attitude, while change fatigue results in feelings of resignation and withdrawal (Bernerth et al., 2011; Elving et al., 2011). There are also similarities and differences between change fatigue and change resistance. Change fatigue is distinguished from change resistance by its passive nature. While those resisting change may assume an active role in disrupting or sabotaging the change process, those experiencing change fatigue will likely disengage from the change altogether and become ambivalent to the success or failure of the process (McMillan & Perron, 2013). Finally, psychological uncertainty may be related to change fatigue, but is a distinct construct. Psychological uncertainty is described as a feeling of confusion caused by a lack of information or understanding about a change initiative. While it is likely related to the development of change fatigue, psychological uncertainty is not dependent on the number or pace of changes taking place in an organization (Bernerth et al., 2011). Like change cynicism, one poorly managed change initiative can result in psychological uncertainty. While change fatigue is a distinct construct, it shares many antecedents and consequences with the constructs with change cynicism, change resistance, psychological uncertainty and burnout.

Antecedents of Change Fatigue

Antecedents of change fatigue will be broken down into three categories: (1) individual-level characteristics; (2) characteristics of change processes; and (3) organizational-level characteristics. In regard to individual characteristics, the research has not yet established consensus on specific individual-level antecedents to change fatigue. Studies exploring individual characteristics and change fatigue have been sparse, and findings have been mixed across studies. In the studies that have been conducted,

demographic variables such as gender and marital status, job status, and work locus of control have been explored in relation to change fatigue. Stensaker, Meyer, Falkenberg, and Haueng (2002) found that female employees, as well as employees who are single or divorced, are more likely to experience change fatigue than male and married employees. However, this finding is not consistent throughout the literature. In their study of change fatigue, Elving, Hansma, & De Boer (2011) found no difference in change fatigue between genders.

While research on the impact of organizational tenure on change fatigue has also been decidedly mixed (Elving et al., 2011), more direct relationships have been identified around the role of organizational hierarchy. Specifically, those who hold positions higher in an organization's structure experience less change fatigue than middle managers or lower organizational positions (Elving et al., 2011; Stensaker et al., 2002). This difference is attributed to the privileged knowledge executives have of the overall change strategy of an organization. They are likely to see all changes as interrelated and part of a holistic change system, while those lower in the organization without access to strategic plans may perceive change initiatives as uncoordinated, unrelated, and unnecessarily grouped. Often, executives are also able to "hand off" the implementation aspect of change initiatives to those beneath them in the organizational hierarchy. As a result, those higher in the organization may not experience substantial differences in their day-to-day roles as a result of change initiatives. Because those occupying positions of power in an organization can assert influence over their environment, organizational hierarchy may also be related to change fatigue through an individual's work locus of control.

Work locus of control is an individual personality trait with an established relationship to the experience of change fatigue (Perel, 2015). General locus of control represents the extent to which a person believes that the rewards they receive are a result of their personal actions (Ng, Sorenson, & Eby, 2006; Rotter, 1966; Wang, Bowling, & Eschleman, 2010). Work locus of control is a context-specific sub-dimension of general locus of control, by which people interpret why they do or do not receive rewards in the work environment (Wang et al., 2010). Individuals with an *external* work locus of control believe that they do not have direct control over what happens to them at work, but instead are passive recipients of fate or luck. Conversely, individuals with an *internal* work locus of control believe that they do have control over their environment and the rewards they receive. Internal work locus of control is significantly related to positive work outcomes, such as job satisfaction, organizational commitment, employee well-being, and positive social interactions at work (Ng et al., 2006; Wang et al., 2010). A direct link has been established between work locus of control and job burnout—those with an internal locus of control are less likely to experience burnout (Bitsadze & Japaridze, 2016; Maslach et al., 2001). Similarly, researchers have established evidence that those with an internal locus of control also experience less emotional exhaustion and change fatigue (Bernerth et al., 2011; Perel, 2015).

In addition to individual characteristics, the nature of change processes themselves are related to employees' experience of change fatigue. Elemental to the construct of change fatigue is the perception that too much change is occurring in an organization. The question becomes: *How much change is 'too much'?* The excessiveness of change as perceived by employees can be a result of one transformative

change, a number of discrete changes implemented simultaneously, or sequential changes with limited time for rest between implementation (Ead, 2015; Stensaker et al., 2002). All of these factors are related to the rate and scale of change initiatives. Because change fatigue is perception-based, an individual's tolerance for change will determine at what point change fatigue becomes an issue. The manner in which change is implemented can also impact the experience of change fatigue. For example, change fatigue can be buffered by participatory decision-making about change initiatives and effective communication about the goals of changes (Caldwell, Herold, & Fedor, 2004; Elving et al., 2011). By involving employees in change implementation, organizations can prevent employees from experiencing change fatigue. In this way, change management is an antecedent that is independent of the rate and scale of change initiatives.

Organizational history and culture are two organization-level factors that can impact the experience of change fatigue. In regard to history, an organization's past experience with change is most relevant to the experience of change fatigue. Specifically, if organizations have experienced a string of change initiative failures, or even one substantial failure, employees are less likely to trust current change processes and are more likely to experience change fatigue (Elving et al., 2011). Moreover, even successful change initiatives can contribute to change fatigue if they are perceived as persistent by the individuals experiencing the change, not allowing time for rest, reflection, and recuperation (Stensaker, Falkenberg, Meyer, & Haueng, 2002).

Organizational Culture and Change Fatigue

The research linking organizational culture and change fatigue forms the foundation of the current study. Perel (2015) explored how organizational culture,

conceptualized through organizational values, was related to employees' experience of change fatigue. Using Quinn and Rohrbaugh's (1981) Competing Values Framework, Perel (2015) found that employees working in group culture-types—characterized by supportive employee relations and decentralized decision making (Goodman, Zammuto, & Gifford, 2001)—experienced less change fatigue. Conversely, employees working in rational culture-types—characterized by productivity, efficiency, low levels of trust, and an emphasis on bottom-line results (Goodman et al., 2001)—experienced increased levels of change fatigue. Similar relationships were found between organizational culture and elements of burnout by Marchand, Haines, & Dextras-Gauthier (2013). In this study, group culture-types were negatively associated with emotional exhaustion while rational culture-types were positively associated with emotional exhaustion (Marchand, Haines, & Dextras-Gauthier, 2013).

In addition to group and rational culture-types, two other culture-types are defined by the Competing Values Framework. The developmental culture-type emphasizes adaptability, change, and horizontal communication with the end goal of organizational growth and creativity. The hierarchical culture-type, like the rational culture-type, values structure and control. Hierarchical cultures are inwardly focused with formal lines of communication and centralized decision-making (Goodman et al., 2001; Perel, 2015). Together, these four culture-types are arranged along two axes, representing internal vs. external orientations and flexibility vs. control (Quinn & Rohrbaugh, 1981), as illustrated in Figure 1. Within these orientations are underlying values that guide the management of organizations (Kalliath, Bluedorn, & Gillespie, 1999).

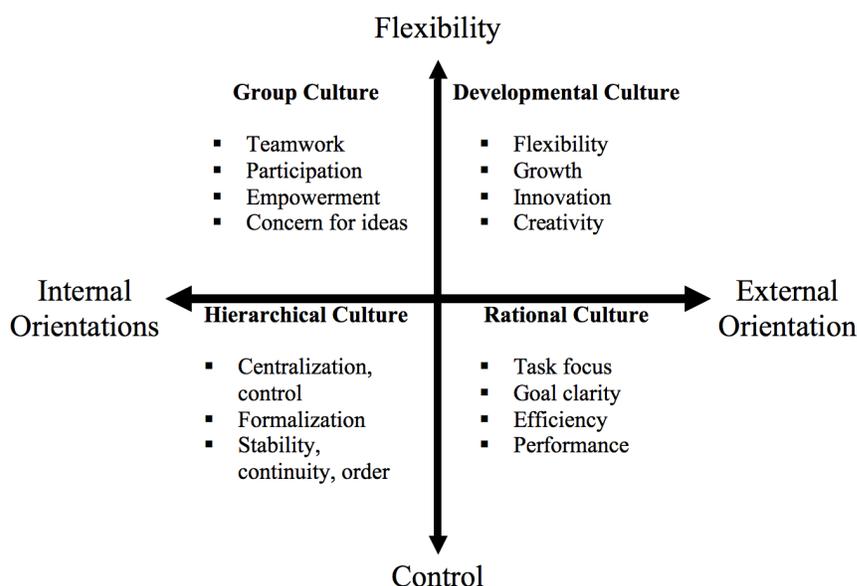


Figure 1. Competing Values Framework

Note. Figure is adapted from “A confirmatory factor analysis of the competing values instrument” (Kalliath et al., 1999).

The Competing Values Framework acknowledges that these culture types are not mutually exclusive—that, in fact, all organizations exhibit elements of each culture. However, organizations do tend to emphasize some sets of values over others (Kalliath et al., 1999). While Perel (2015) found no significant relation between the latter two culture types (developmental and hierarchical) and change fatigue, these two culture-types share characteristics with those cultures for which Perel (2015) was able to detect a relationship with change fatigue. For this reason, this research revisits Perel’s results by analyzing how all four culture-types relate to change fatigue. Because of the pervasive and somewhat elusive nature of organizational culture, this variable deserved continued attention in change fatigue research.

Consequences of Change Fatigue

Change fatigue has consequences for individual employees and for the organizations in which they work. These consequences have been explored in change literature, stress literature, and in direct relationship to change fatigue. For employees who are responsible for implementation, organizational change has been linked to significant hormonal responses that may reduce an employee's ability to recover from stress over time. These hormonal shifts have long-term implications for employee health if they are sustained for extended periods (Hansson et al., 2008). For some individuals, chronically heightened stress levels are also a risk factor for cardiovascular disease, depression, and cancer (Hart, 2009). Like burnout, a strong relationship has been established between change fatigue and emotional exhaustion (Bernerth et al., 2011; McMillan & Perron, 2013; Perel, 2015). Exhaustion is described as a feeling of depletion or being overextended beyond your capacity to meet workplace demands (Bernerth et al., 2011). The relationship between change fatigue and emotional exhaustion is especially perilous for educators, as research has tied higher levels of teacher emotional exhaustion to lower levels of student achievement (Arens & Moren, 2016; Klusmann, Richter, & Lüdtke, 2016). At the individual level, change fatigue has serious implication for the physical and psychological well-being of employees, which in turn, has implications for the organizations in which they work.

Consequences of change fatigue at the organizational level include employee withdrawal, turnover intentions, and erosion of change initiatives. As described above, change fatigue is strongly related to employee exhaustion. Exhaustion can result in reduced performance and increased sick days among employees (Hansson et al., 2008).

Change fatigue has also been established as a precursor to turnover through increased turnover intentions (Bernerth et al. 2011). Decreased performance and turnover intentions are both forms of withdrawal, and the cost to organizations is substantial. Even if an employee is able to continue performing routine duties, change fatigue makes it highly unlikely that they will exert concerted effort toward their work, including effort needed to support the successful implementation of change initiatives (McMillan & Perron, 2013). Unlike change resistance which poses an immediate and visible threat to change initiatives, change fatigue is less visible and erodes change initiatives slowly making intended results unsustainable over time (McMillan & Perron, 2013).

Person-Organization (P-O) Fit

Person-organization fit represents the extent to which an individual is compatible with the organization in which they work (Kristof, 1996). This compatibility can take several forms. Compatibility can occur when one entity meets the needs of the other (e.g., an organization provides flexible hours for a working parent, or an employee possesses the needed skills to accomplish organizational goals). Compatibility can also occur when organizations and individuals share fundamental characteristics (e.g., the organization and the individual both value innovation or honesty). Finally, compatibility can occur when both conditions described above are met, and needs as well as fundamental characteristics are aligned (Kristof, 1996). Person-organization fit is one component of person-environment fit. Other components include person-vocation fit, person-group fit, and person-job fit (Kristof, 1996). While all elements of fit are valuable in understanding the behaviors that result from the interaction of an employee with their environment, this study looks exclusively at person-organization fit. This is appropriate because the

variable of interest—culture—is being examined at an organizational level for its impact on change fatigue.

Positive person-organization fit has substantial, long-term outcomes for employees and organizations. Research has demonstrated that P-O fit is a determinant for a variety of workplace attitudes, including job satisfaction and organizational commitment (Kristof, 1996; O'Reilly et al., 1991; Posner, 2010). Among the benefits to employees and organizations who fit well together, employees experience greater levels of motivation, experience less anxiety and work stress, and behave more ethically. These results hold true across functional areas of employment, gender, and education level (Posner, 2010). Employees with high levels of P-O fit are also less likely to report intentions to leave their organizations (Kristof, 1996; O'Reilly et al., 1991, Wei, 2015) and more likely to engage in pro-social behavior (Kristof, 1996). While some have speculated that too much “fit” within an organization may stunt organizational growth and development (Kristof, 1996), P-O fit is generally regarded as a precursor to a variety of positive employee outcomes. It is worth noting that, for many of the negative consequences of change fatigue described above, P-O fit is related to positive outcomes in general work settings. For example, increased work stress, increased turnover intentions, and reduced organizational commitment are all associated with change fatigue. Conversely, research has demonstrated that P-O fit is related to reduced work stress, reduced turnover intentions, and increased organizational commitment (Kristof, 1996; Posner, 2010; Wei, 2015). The contrasting patterns of how change fatigue and P-O fit interact with these variables suggest that P-O fit may serve as a buffer against the

negative outcomes of change fatigue in an organization that is experiencing extensive change.

Person-organization fit is operationalized in a variety of ways. Goal congruence, or the degree to which an individual's goals fit with the goals of an organization, is one way that P-O fit is operationalized in organizations (Kristof, 1996). Another operationalization of fit is personality congruence, the extent to which an individual's personality aligns with an organization's climate (Kristof, 1996). A third operationalization of fit, the similarity of values between organizations and individuals, has received significant attention in the literature (Edwards & Cable, 2009; Piasentin & Chapman, 2006). Hofstede, Neuijen, Ohayy, and Sanders (1990) describe values as non-specific feelings of good and bad, or a preference for one set of ideas over another. Values are given weight in the conceptualization of P-O fit because they are fundamental to the identity of both organizations and individuals and they are relatively enduring over time (Chatman, 1991). Furthermore, values are often described as the core of organizational culture, manifested through cultural practices, symbols, heroes, and rituals (Hofstede et al., 1990). Some of the most influential tools for measuring culture are value-based, including Hofstede's (1990) Multi-focus Model, Quinn and Rohrbaugh's (1981) Competing Values Framework, and O'Reilly, Chatman, and Caldwell's (1991) Organizational Culture Profile. Values are fundamental to the cultural makeup of organizations and, therefore, are useful in the measurement of P-O fit when organizational culture is of interest.

Because values are relatively stable over time and are the theoretical foundation of organizational culture, this research utilizes a values-based conceptualization of P-O

fit. This conceptualization supports the exploration of organizational culture and change fatigue by basing frameworks of culture, as well as conceptualizations of fit, on individual and organizational values. The enduring nature of values is especially useful in the context of organizational change, when elements like organizational goals and climate may undergo significant shifts.

Measurement of P-O Fit

Several critical decisions must be made when determining how to measure P-O fit. Two decisions are automatically made by virtue of studying value congruence. The first of these decisions is whether to evaluate supplementary or complementary fit. Supplementary fit is concerned with measuring similarities between individuals and organizations. Complementary fit is concerned with measuring how two entities combine to add what was missing to either entity in isolation. (Kristof, 1996; Piasentin & Chapman, 2006). Because this research is interested in evaluating the *congruence* of values, supplementary fit is the focus of all measurements.

P-O fit can be measured subjectively or objectively. Subjective measurement of P-O fit (also referred to as direct measurement) involves explicitly asking participants whether they believe that they fit well within their organizations (Kristof, 1996; Piasentin & Chapman, 2006). Subjective measurement may involve asking a question like, “Do you think your values align with the values of your organization?” In this way, subjective measurement is a measurement of perceived fit from the perspective of an individual employee. This kind of measurement is beneficial if the construct under investigation is also perception based (Edwards & Cable, 2009; Kristof, 1996). Among the criticisms of subjective measurement is the concern that it may lead to a consistency bias if it is

measured in conjunction with other work attitudes. For example, if a teacher reported that they did not think their values aligned with the values of their school and were, in the same encounter, asked if they enjoyed their job, the teacher may feel compelled to accurately or inaccurately report job dissatisfaction, in order to be consistent with their appraisal of value incongruence.

Objective measurement of fit, also called indirect measurement, involves gathering data about the characteristics of organizations and the characteristics of individuals and rating the separate data sets on some indices of similarity (Kristof, 1996). To objectively evaluate value congruence, it would be necessary to independently gather data about the values of an organization, the values of an individual, and to evaluate the degree of fit between the two value profiles. In some cases, indirect measurement may be more accurate than direct measurement. However, it is common practice to gather all data from a common source, namely the individual being assessed—many measures of P-O fit will ask an individual to evaluate their own values as well as the values of their organization. Based on their responses, expressed individual and organizational values will be assessed for degree of fit (Kristof, 1996). This kind of measurement, just like subjective assessment of fit, is based on perceptions and may not be truly objective.

That being said, there are advantages to utilizing perception-based measurements. Nisbett & Ross (1980) explain that people's perceptions of reality often determine their cognitive appraisals and resulting behaviors in response to a novel situation. Essentially, what people think is real determines how they feel and behave. Because of this, measuring perceptions of organizational characteristics may be an appropriate predictor of individual outcome variables, such as change fatigue. Kristof (1996) suggests that

perceptions of P-O fit will have a stronger influence than verifiable P-O fit on individual outcome variables such as stress, satisfaction, and commitment, especially when measuring value congruence. Edwards & Cable (2009) also recommend utilizing subjective measures of value congruence when the dependent variable is an attitude or perception.

For these reasons, the current study utilized subjective P-O fit as a potential mediator of organizational culture and change fatigue. This is appropriate because change fatigue is a perception-based construct, so it is likely that mediators of relationships with change fatigue will also be perception based. Further, research has shown that perceptions have a stronger influence on individual outcomes like change fatigue than objective fit (Kristof, 1996).

Purpose and Hypotheses

In consideration of the pervasive nature of change in the workplace, this study pursues additional understanding around factors that contribute to change fatigue. Perel (2015) provided initial evidence that organizational culture is related to change fatigue. This study sought to replicate Perel's findings as outlined by the following hypothesis:

Hypothesis 1: Organizational culture-type will be related to change fatigue.

1a: The group culture-type will be negatively related to change fatigue.

1b: The rational culture-type will be positively related to change fatigue.

Additionally, because of the overlapping characteristics of cultures within the Competing Values Framework, the following relationships were also hypothesized:

1c: The developmental culture-type will be negatively related to change fatigue.

1d: The hierarchical culture-type will be positively related to change fatigue.

This study further hypothesized that subjective person-organization fit would act as a mediator in the relationship between organizational culture and change fatigue.

Hypothesis 2: Subjective P-O fit will mediate the relationship between organizational culture-type and change fatigue.

Finally, to support the validation of change fatigue as a relatively new construct, this study sought to confirm previously established relationships between change fatigue, emotional exhaustion, and employee attitudes including turnover intentions and organizational commitment.

Hypothesis 3: Change fatigue will be positively related to emotional exhaustion.

Hypothesis 4: Change fatigue will be positively related to turnover intentions.

4a: Change fatigue will be positively related to job turnover intentions.

4b: Change fatigue will be positively related to career turnover intentions.

Hypothesis 5: Change fatigue will be negatively related to organizational commitment.

CHAPTER II: METHODS

Participants

The final sample for this study was composed of 752 teachers and administrators currently serving in Tennessee public schools. Researchers recruited study participants through a collaboration with the Tennessee Education Association (TEA), a statewide professional organization for educators. TEA advertised the study in their member newspaper and distributed an invitation to participate via their membership e-mail list. The invitation e-mail included a link to the online survey. Of those who participated, 85.6% reported that they received the survey link directly from the TEA e-mail. The remaining participants reported that they received the survey link from a friend (6.4%) or by some other means (7.2%). The advantage of using an organization external to individual schools to disperse the survey was giving teachers and administrators confidence that their responses were anonymous in order to increase trust in the surveying process. TEA was not able to directly access any survey responses.

A total of 1039 participants entered the online survey. However, 287 participants were not included in the final data set. Of those, 284 participants did not complete the measures needed to address the study's hypotheses. One (1) participant was not included because 100% (2 out of 2) of the inattentive responding checks were answered incorrectly. Two (2) participants were not included because they did not meet the study's participation requirements (e.g., they were not actively working in a public schools).

Select demographic information was collected from all study participants. Of the final sample of 752, 90.8% were full-time teachers, 1.3% were part-time teachers, 4.9% were administrators, and 2.9% self-identified as serving in a professional education role

other than teacher or administrator (e.g., instructional support staff). In regard to grades with which educators worked, 2.4% worked in pre-kindergarten, 42.1% worked in kindergarten through 5th grade, 21.4% worked in 6th through 8th grades, 28.2% worked in 9th through 12th grades, and 6.0% worked in some combination of these grades (e.g., K-12, or 1st-7th). See Table 1 for frequencies for all collected participant demographics.

Table 1
Frequencies of Demographic Variables

Variable	Frequency	%	
Position	Full-time Teacher	680	90.79
	Part-time Teacher	10	1.34
	Administrator	37	4.94
	Other	22	2.94
	Total	749	100.00
Grades Taught	Pre-K	18	2.39
	K-5	317	42.15
	6-8	161	21.41
	9-12	211	28.06
	Other Combination	45	5.98
	Total	752	100.00
Years at Current School	Under 2 years	75	10.09
	2-4 years	110	14.80
	5-9 years	152	20.45
	10-15 years	165	22.21
	15 or more years	241	32.44
	Total	743	100.00
Years in Public Schools	Under 2 years	20	2.68
	2-4 years	38	5.10
	5-9 years	95	12.75
	10-15 years	167	22.42
	15 or more years	425	57.05
	Total	745	100.00

Table 1
Frequencies of Demographic Variables (continued)

Variable		Frequency	%
Availability of Tenure	Yes	632	93.91
	No	41	6.09
	Total	673	100.00
Tenure Status	Tenured	547	76.50
	Not Tenured	168	23.50
	Total	715	100.00
Guardian of School-Age Children	Yes	268	36.07
	No	475	63.93
	Total	743	100.00
Survey Source	TEA Announcement	644	86.33
	Referral from a Friend	48	6.43
	Other	54	7.24
	Total	746	100.00
% Free and Reduced Lunch Recipients at Current School	0-10%	14	2.09
	10-25%	40	5.97
	25-50%	155	23.13
	50-75%	206	30.75
	Greater than 75%	255	38.06
	Total	670	100.00

Measures Related to Hypotheses

Organizational Culture

A modified version of the Competing Values Framework (Quinn & Rohrbaugh, 1981) was used to assess organizational culture. This measure, developed by Kalliath, Bluedorn, & Gillespie (1999), contained four (4) subscales, each measuring one (1) competing values dimension (Group, Rational, Developmental, and Hierarchical). Each subscale was composed of four (4) value statements (e.g., “Innovation and Change,” and “Teamwork and Cohesion”) associated with the applicable culture. This measure was originally based on a seven-point Likert scale, ranging from 1 (not valued at all) to 7

(highly valued). Cronbach's alphas were reported by Kalliath et al. for each subscale, with the group subscale reporting an alpha of .90, the rational subscale reporting an alpha of .83, the developmental subscale reporting an alpha of .83, and the hierarchical subscale reporting an alpha of .80. Coefficient alphas were also reported for each item with all items exceeding a minimum coefficient alpha of .69 (Kalliath et al., 1999).

To align this measure with other scales used in the study, a modified, five-point Likert scale was used to assess the value statements. For each value statement, participants were asked to identify to what extent the statement characterized something that was valued by their organization (1=Not Valued at All; 5= Extremely Valued). Because this research was based in public schools, the stem was modified to the following: "To what degree is each of the following valued by your school?" A copy of the modified measure can be found in Appendix A.

Change Fatigue

A change fatigue measure developed by Bernerth, Walker, & Harris (2011) was used to operationalize change fatigue in this study. The six-item measure aims to assess the perception that too much change is taking place and has a cited coefficient alpha of .85 (Bernerth et al., 2011). The original measure used a seven-point Likert scale (1=Strongly Disagree; 7=Strong Agree), and contains items like "*We are asked to change too many things at my organization*" and "*I would like to see a period of stability before we change anything else in this company.*" For the purposes of this study, this scale was modified to a five-point Likert scale (1=Strongly Disagree, 5=Strongly Agree). Terminology referring to "my organization" or "company" was changed to "school". A copy of the modified measure can be found in Appendix B.

Person-Organization Fit

This study assessed subjective P-O fit as a potential mediator of the relationship between organizational culture and change fatigue. Perception-based measurement of P-O fit, often referred to as subjective fit (Edwards & Cable, 2009), measures the congruence of a person's self-identified personal values and that same person's perceptions of the values of their organization. A three-item measure developed by Cable & Judge (1996) was used to assess subjective P-O fit for this study. Internal consistency for the original three-item scale was reported at .87 (Cable & Judge, 1996). For the purposes of this study, items referring to "this organization" were modified to refer to "this school." The three items were assessed by participants on a five-point Likert scale (1=Not at All; 5=Completely) and read as follows: "*To what degree do you feel your values 'match' or fit this school and the current employees in this school,*" "*Do you think the values and "personality" of this school reflect your own values and personality,*" and "*My values match those of the current employees in this school.*" A copy of this modified measure can be found in Appendix C.

Emotional Exhaustion

A nine-item subscale of Maslach and Jackson's (1981) burnout inventory was used to assess emotional exhaustion. This scale measures frequency of exhaustion on a seven-point Likert scale (0=Never; 1=A few times per year; 7=Every day). The original scale demonstrated reliability with a coefficient alpha of .89 (Maslach & Jackson, 1981) and included items such as "*I feel fatigued when I get up in the morning and have to face another day,*" and "*I feel frustrated by my job.*" A copy of this measure can be found in Appendix D.

Organizational Commitment

A nine-item version of the Organizational Commitment Questionnaire was used to operationalize organizational commitment. This measure, developed by Mowday, Steers, & Porter (1979) was constructed using a 7-point Likert scale (1=Strongly disagree; 7=Strongly agree) and includes items like “*I am proud to tell others that I am a part of my organizations,*” and “*I really care about the fate of my organization.*” Cronbach’s alpha for the original scale was reported at .89 (Mowday et al., 1979). Like previous scales, this scale was also shifted to a five-point Likert scale (1=Strongly Disagree, 5=Strongly Agree), and language was modified to fit a school setting. See Appendix E for a copy of this measure.

Job Turnover Intentions

A five-item scale developed by Wayne, Shore, & Liden (1997) was used to assess job turnover intentions. In the context of this study, job turnover intentions reflect the degree to which educators intend to move from one professional education role to another. Because of the unique turnover patterns among professional educators, it is necessary to distinguish job turnover intentions from career turnover intentions, contrasted by the National Center for Education Statistics as “movers” and “leavers” (U.S. Department of Education, 2015). Job turnover intentions captures the intentions of the former. It should be noted that in previous change fatigue studies, the variable of turnover intentions can be most directly compared to what this study refers to as job turnover intentions.

The original measure by Wayne et al. employs a seven-point Likert scale (1=Strongly disagree; 7=Strongly agree) to assess the intentions of an employee to leave

their organization, including statements like “*I think I will be working at my current employer five years from now,*” (reverse scored), and “*I am actively looking for a job outside my current employer.*” Cronbach’s alpha was reported at .89 for the original measure (Wayne et al., 1997). For the purposes of this study, the scale was shifted to a five-point Likert scale (1=Strongly Disagree, 5=Strongly Agree), and language was modified to fit a school setting. See Appendix F for a copy of this measure.

Career Turnover Intentions

Three items from Wayne, Shore, & Liden’s (1997) original five-item turnover intentions scale were modified to measure career turnover intentions. In contrast to the job turnover intentions described above, career turnover intentions reflect the degree to which educators plan to leave their profession entirely. Educators that act upon career turnover intentions are referred to as “leavers” by the National Center for Education Statistics (U.S. Department of Education, 2015). The three modified items were measured on a five-point Likert scale (1=Strongly Disagree, 5=Strongly Agree). For teachers, the three items were as follows: “*I am actively looking for a job outside of teaching,*” “*As soon as I can find a better job, I’ll leave teaching,*” and “*I am seriously thinking about quitting teaching.*” For administrators, the three items were identical but referred to public school administration instead of teaching. See Appendix G for a copy of this measure.

Additional Measures

Because of the unique opportunity presented by surveying this sample of educators, several measures were included in the final survey that were beyond the scope of the study’s hypotheses. Below is a list of measures that, while not a part of the planned

study, were utilized for post hoc analyses to provide additional insight into the study's results. Also listed below are measures that were included in survey but not utilized in this study's analyses. The results of all measures may be useful in future research.

Layered Change

A scale was also developed to measure the degree of layered change initiatives experienced by study participants. Layered change is defined as multiple change initiatives occurring simultaneously. The intention of this scale was to assess how layered change initiatives impact the ability of educators to follow-through on the changes they are asked to make. The six-item measure used a five-point Likert scale (1=Strongly Disagree, 5=Strongly Agree). High scores on this scale indicate that layered change initiatives are compromising the ability of educators to follow-through on changes they are asked to implement. See Appendix H for a copy of this measure.

Change Support

Support for organizational change at an individual level (referred to as "Change Support") was measured using a five-item scale developed for the purposes of this study. The scale was measured on a five-point Likert scale (1=Strongly Disagree, 5=Strongly Agree). See Appendix I for a copy of this measure.

Supervisor Satisfaction

Supervisor satisfaction was measured using three relevant items found in Hackman and Oldham's (1974) Job Diagnostic Survey. The original seven-point Likert scale was modified to a five-point Likert scale (1=Extremely Dissatisfied, 5=Extremely Satisfied). Language was also modified to identify the school's principal as the supervisor of interest. See Appendix J for a copy of this measure.

Days Off Work

A one-item scale was included in which participants were asked to estimate the number of personal days off they had taken in the last twelve months because of feeling overwhelmed or emotionally exhausted. A second part to this item asked participants to reference their initial answer and indicate if this number was more, less, or about the same as the year prior to the current year. While participants completed both parts of this item, only the initial question was utilized for the purpose of this study. See Appendix K for a copy of this measure.

Work Locus of Control

A measure of work locus of control was included in the survey, but data from this measure was not utilized in this study. Work locus of control was measured using a modified, 16-item version of Spector's (1988) Work Locus of Control Scale. The original seven-point Likert scale was shifted to a five-point Likert scale (1=Strongly Disagree, 5=Strongly Agree). See Appendix L for a copy of this measure.

Demographics

Study participants were asked about several demographic variables, including primary grades taught, age, if they were tenured in their current school district, how many years they have worked in public schools, how many years they have worked in their current school, if they were the guardian of a school-age child at the time of survey completion, and the percent of students receiving free or reduced school lunches in their current school. When completing items regarding age, years worked in their current school, and years worked in public schools, participants identified an appropriate range, not a specific number. The percentage of students receiving free and reduced lunch

within a school is related to the number of students living in poverty within the school. While this figure isn't directly measuring poverty levels, it was included in this study to control for potential differences between schools based on the socio-economic level of the school's student body. The National Center for Education Statistics (NCES) defines high-poverty schools as those in which 75% or more of the student population are eligible for free or reduced lunches (U.S. Department of Education, 2017). See Appendix M for a copy of the demographic items included in this study.

Procedure

A 99-item survey was constructed on Qualtrics containing all items from the measures described above. Of the total 99 items, six (6) items were available to teachers only. Three (3) items were available to administrators only. Eleven (11) items were demographic questions located at the end of the survey and available to all participants. Two (2) items were included as checks for inattentive responding ("Answer 'very valued' for this item" and "What year are you completing this survey?"). If a participant answered both items incorrectly, their responses were excluded from data analysis.

A link to the online survey was distributed to teachers and administrators through an e-mail sent to TEA's membership by TEA leadership. A copy of this e-mail can be found in Appendix N. The survey was open for one week in early 2017. A reminder to complete the survey was sent to TEA's membership via e-mail two (2) days before the close of the survey.

The survey began with a brief introduction to the study, a description of participant qualifications, and an opportunity to agree to or decline participation. As a part of this introduction, participants were guaranteed anonymity. Following the

introduction, the survey began with the scales described above. To avoid priming specific value domains, the competing values scales were completed first, followed by the scales measuring subjective P-O fit, change fatigue, emotional exhaustion, job turnover intentions, organizational commitment, work locus of control, career turnover intentions, supervisor satisfaction (teachers only), change support, the degree of layered change, and days off work. Demographic information was collected at the conclusion of the survey.

CHAPTER III: RESULTS

Preliminary Analyses

Descriptive statistics were run on all variables used in the study. See Table 2 for descriptive statistics. Next, reliability analyses were conducted on all scales used in the study. Cronbach's Alpha was calculated for each scale in order to establish internal reliability. Internal reliability for all scales was sufficient, ranging from 0.82 to 0.95. See Table 3 for results of the reliability analyses. Following the reliability analyses, intercorrelations were run on all non-demographic variables. See Table 4 for intercorrelations among non-demographic variables. Intercorrelations including demographic variables can be found in Appendix O¹. Descriptive statistics, reliability analysis results, and variable intercorrelations for the work locus of control scale (not used in this study) can be found in Appendix P.

¹ Correlation analyses were only conducted for demographic variables rated on ratio or interval scales.

Table 2
Descriptive Statistics

Variable	<i>n</i>	<i>Mean</i>	<i>SD</i>	Min	Max
Organization Culture Type					
Group	752	3.14	0.94	1.00	5.00
Rational	751	4.01	0.76	1.00	5.00
Developmental	745	3.20	0.83	1.00	5.00
Hierarchical	744	3.46	0.83	1.00	5.00
Change Fatigue	749	4.10	0.87	1.00	5.00
Subjective P-O Fit	752	3.61	0.90	1.00	5.00
Job Turnover Intentions	747	2.59	1.12	1.00	5.00
Career Turnover Intentions					
Teachers	708	2.53	1.18	1.00	5.00
Administrators	33	2.00	1.14	1.00	5.00
Emotional Exhaustion	751	4.53	1.49	1.00	7.00
Organizational Commitment	751	3.66	0.82	1.00	5.00
Layered Change	746	3.85	0.72	1.00	5.00
Change Support	743	2.53	0.76	1.00	5.00
Supervisor Satisfaction	713	3.38	1.15	1.00	5.00

Table 3
Scale Reliabilities

Scale	Cronbach's Alpha	Number of Items
Organization Culture Type		
Group	0.89	4
Rational	0.82	4
Developmental	0.85	4
Hierarchical	0.83	4
Change Fatigue	0.95	6
Subjective P-O Fit	0.85	3
Job Turnover Intentions	0.92	5
Career Turnover Intentions		
Teachers	0.93	3
Administrators	0.95	3
Emotional Exhaustion	0.93	9
Organizational Commitment	0.92	9
Layered Change	0.86	6
Change Support	0.88	6
Supervisor Satisfaction	0.93	3

Table 4
Intercorrelations Among Non-Demographic Variables

	N	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Change Fatigue	749	--													
2. Group Culture	752	-.34**	--												
3. Developmental Culture	745	-.23**	.80**	--											
4. Rational Culture	751	-.06	.59**	.65**	--										
5. Hierarchical Culture	744	-.24**	.76**	.68**	.72**	--									
6. Subjective P-O Fit	749	-.25**	.69**	.62**	.52**	.66**	--								
7. Job Turnover Intentions	747	.31**	-.48**	-.42**	-.28**	-.41**	-.53**	--							
8. Career Turnover Intentions-Teachers	708	.26**	-.31**	-.27**	-.17**	-.26**	-.34**	.73**	--						
9. Career Turnover Intentions-Admin	33	.27	-.25	-.27	-.17	-.19	-.10	.87**	--	--					
10. Emotional Exhaustion	751	.48**	-.37**	-.30**	-.17**	-.34**	-.40**	.55**	.54**	.36*	--				
11. Organizational Commitment	751	.30**	.73**	.63**	.49**	.65**	.77**	-.64**	-.41**	-.34	-.43**	--			
12. Layered Change	746	.68**	-.43**	-.37**	-.24**	-.36**	-.37**	.32**	.25**	.10	.43**	-.36**	--		
13. Change Support	743	-.59**	.50**	.44**	.27**	.41**	.42**	-.41**	-.31**	-.41*	-.43**	.45**	-.65**	--	
14. Supervisor Satisfaction	713	-.32**	.73**	.61**	.40**	.57**	.61**	-.49**	-.31**	--	-.39**	.70**	-.37**	.46**	--
15. Days Off	710	.19**	-.16**	-.12**	-.06	-.11**	-.18**	.25**	.28**	.06	.28**	-.19**	.12**	-.25**	-.18**

Note. ** $p < .01$, * $p < .05$

Finally, preliminary analyses were conducted to assess the distribution of mean scale scores on all non-culture variables rated on a 5-point agreement scale. Mean scale scores were categorized as being favorable, neutral, or unfavorable. For variables that represent a desirable attitude or state-of-being (Subjective P-O Fit, Organizational Commitment, Change Support, and Supervisor Satisfaction), high mean scores are categorized as favorable responses and low mean scores are categorized as unfavorable. For variables that represent an undesirable attitude or state-of-being (Change Fatigue, Job Turnover Intentions, Career Turnover Intentions, and Layered Change), high mean scores are categorized as unfavorable responses and low mean scores are categorized as favorable. See Table 5 for the distribution of mean scores on all measures rated on a 5-point scale.

The variable of emotional exhaustion was not categorized in this way because of the nature of the 7-point frequency scale on which emotional exhaustion was rated. This scale asked participants to report how often they experienced emotional exhaustion, ranging from never to daily. Because every response except “Never” represented some degree of emotional exhaustion which by its nature is unfavorable, there was not a clear basis for determining favorable, neutral, or unfavorable responses. However, when subdividing the means by frequency of emotional exhaustion, 53.4% of study participants reported feeling emotionally exhausted at least once a week with many of these respondents feeling emotionally exhausted more than once a week.

Table 5
Mean Score Distribution of Non-Culture Variables Rated on 5-Point Scale

Variable	n	Unfavorable	Neutral	Favorable
Change Fatigue	749	86.4%	3.5%	10.1%
Subjective P-O Fit	752	22.1%	8.2%	69.7%
Job Turnover Intentions	747	34.4%	6.8%	58.8%
Career Turnover Intentions				
Teachers	708	32.1%	9.0%	58.9%
Administrators	33	18.2%	9.1%	72.7%
Organizational Commitment	751	20.4%	4.4%	75.2%
Layered Change	746	85.8%	3.6%	10.6%
Change Support	743	70.3%	8.2%	21.5%
Supervisor Satisfaction	713	30.6%	10.1%	59.3%

Note:

n=Number of participants completing variable scale

Unfavorable=Mean scale score below 3 on desirable variables and mean scale score above 3 on undesirable variables

Neutral= Mean scale score at 3

Favorable= Mean scale score above 3 on desirable variables and mean scale score below 3 on undesirable variables

Primary Analyses

Organizational Culture and Change Fatigue

Hypothesis 1 predicted that organizational culture-types within the Competing Values Framework would be related to change fatigue. Pearson's correlations ($\alpha = .05$) were conducted to assess the nature of the relationship between each culture-type and change fatigue. Before performing each correlation, analyses were performed to identify possible covariates of change fatigue with the intention of controlling for significant covariates if found. The variables that were assessed for possible covariation were the

number of years a participant had worked in his/her current schools, the number of years a participant had worked in public schools, and the age of participants. These variables were selected for investigation because research on the effects of organization tenure and age on change fatigue have been sparse and mixed in their findings. The results of these analyses showed that the number of years worked in public school and age did not have a significant relationship with change fatigue. Thus, subsequent analyses did not control for these variables. The number of years a participant had worked in their current school had a small, positive relationship with change fatigue ($r = .13, p < .001$). However, when this variable was controlled for in subsequent analyses through partial correlations investigating the relationship between organizational culture-types and change fatigue, it did not change the rounded correlation coefficients found in uncontrolled analyses of the same relationships. Because the effect of this variable was not discernable in the rounded correlation coefficients, it was not controlled for in final analyses.

Hypothesis 1a predicted that the group culture-type would be negatively related to change fatigue. A Pearson's correlation ($\alpha = .05$) indicated support for this hypothesis ($r = -.34, p < .001$). Hypothesis 1c predicted that the developmental culture-type would also be negatively related to change fatigue. This hypothesis was also supported ($r = -.23, p < .001$). In other words, as the presence of both group and developmental culture-types within public schools increased, change fatigue decreased.

Hypotheses 1b and 1d predicted that the rational culture-type and the hierarchical culture-type, respectively, would be positively related to change fatigue. Hypothesis 1b and 1d were not supported. The rational culture-type showed no significant relationship with change fatigue. However, the rational culture-type also had a highest mean of the

four cultures ($M = 4.01$, $SD = .76$) and the smallest variance among participants (see Table 2 for comparison to other culture-types). In fact, 62.2% of respondents fell between a mean scale score of 4.0 and 5.0 of the five-point scale measuring the rational culture-type within their schools.

The relationship between the hierarchical culture-type and change fatigue was also different than predicted. The hierarchical culture-type showed a significant negative relationship with change fatigue ($r = -.24$, $p < .001$). With this finding in mind, one notable result illustrated in the intercorrelation matrix (See Table 4) is that hierarchical culture was found to be significantly, positively related to supervisor satisfaction ($r = .57$, $p < .001$), which was defined within the study as satisfaction with a school principal. Possible implications of this relationship will be addressed in the *Discussion* section.

Cluster Analysis

Following the assessment of Hypothesis 1, a cluster analysis was conducted to examine if salient patterns of culture (beyond those defined by the Competing Values Framework) emerged within the sample. This analysis was conducted in acknowledgment of the fact that organizations do not belong to one culture-type, but instead have elements of multiple culture-types existing simultaneously. The Ward and Hook method (Ward, 1963) was used to generate initial culture clusters. This procedure was followed by a nonhierarchical k -means analysis to assign individual cases to the identified culture clusters. While several analyses were conducted using different numbers of clusters, no definitive culture-types emerged. In fact, rather than forming a culture typology, emerging clusters were characterized by the strength of overall culture

across all four culture-types (as defined by the Competing Values Framework). Cases scoring high on all four culture-types were clustered together, as were cases scoring low on all four culture-types. Because a new culture typology did not emerge from the cluster analysis, all subsequent analyses utilized the four culture-types defined by the Competing Values Framework.

Mediation of Person-Organization Fit

Hypothesis 2 predicted that subjective person-organization (P-O) fit would have a mediating effect on the relationship between perceived organizational culture and change fatigue. To find mediation would mean that the variable of subjective P-O fit explains part or all of the relationship between organizational culture-type and change fatigue. Baron and Kenny's (1986) three-step mediation analysis was used to look for mediation. A separate analysis was conducted for each culture-type. No analysis was conducted for the rational culture-type because this culture-type did not show a significant relationship with change fatigue in previous analyses.

The first step of Baron and Kenny's three-step analysis was to estimate a regression model in which the independent variable of organizational culture-type predicted the mediator of P-O fit. If this model was significant, the analysis proceeded to the second step, which involved the estimation of a regression model in which the independent variable of organizational culture-type predicted the dependent variable of change fatigue. If this model was also significant, the third step was to estimate a regression model in which the independent variable of organizational culture and the mediator of P-O fit *both* predicted the dependent variable of change fatigue. If all three regression models were significant, the beta coefficients in each model were examined

for signs of mediation. If the beta coefficient representing the effect of organizational culture-type on change fatigue was smaller in the third equation than the second equation, it was determined that some degree of mediation was present. This determination is possible because a smaller beta coefficient for the independent variable (organizational culture-type) when the mediator of P-O fit is added in the third equation signifies that some of the variance accounted for by the independent variable in the second equation is actually caused by the mediator. Full mediation has occurred if the effect of the independent variable (organizational culture-type) is not significant in the third equation. Partial mediation has occurred if the beta coefficient of the independent variable (organizational culture-type) is smaller in the third equation than the second equation. In contrast, if the beta coefficient representing the effect of organizational culture-type on change fatigue is the same size in the third equation as in the second equation, or if the beta coefficient representing the effect of the mediator (P-O fit) on change fatigue is not significant in the third equation, no mediation has occurred.

For the group culture-type, the regression model in which the independent variable of group culture predicted the mediator of subjective P-O fit was found to be significant ($F(1, 750) = 690.12, p < .001, R^2 = .48$). The regression model in which the independent variable of group culture-type predicted the dependent variable of change fatigue was also significant ($F(1, 747) = 97.69, p < .001, R^2 = .12$). When both group culture-type and P-O fit were added to the model to predict change fatigue, the overall model was significant ($F(2, 746) = 48.97, p > .001, R^2 = .12$). However, the mediator (P-O fit) was not a significant predictor of change fatigue in this model. Therefore, no mediation was present. Not only does P-O fit not mediate the relationship between group

culture-type and change fatigue, P-O fit does not account for any unique variance in the relationship between the group culture-type and change fatigue. See Figure 2 for a model of the results.

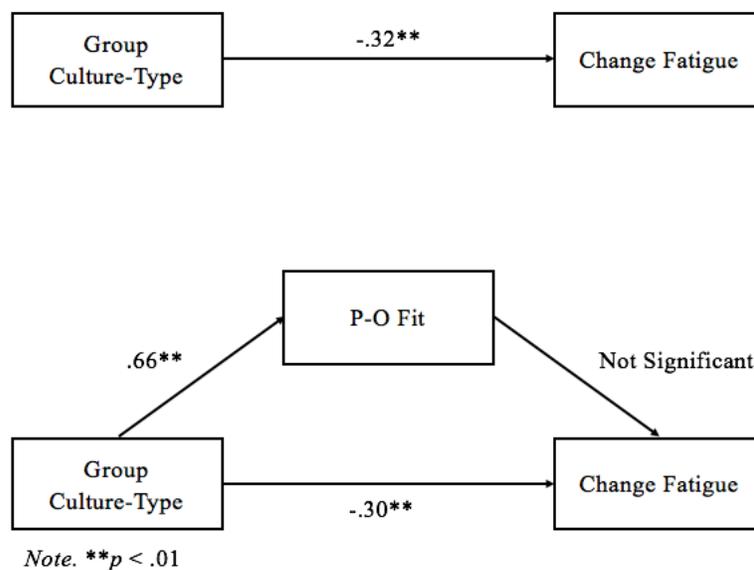
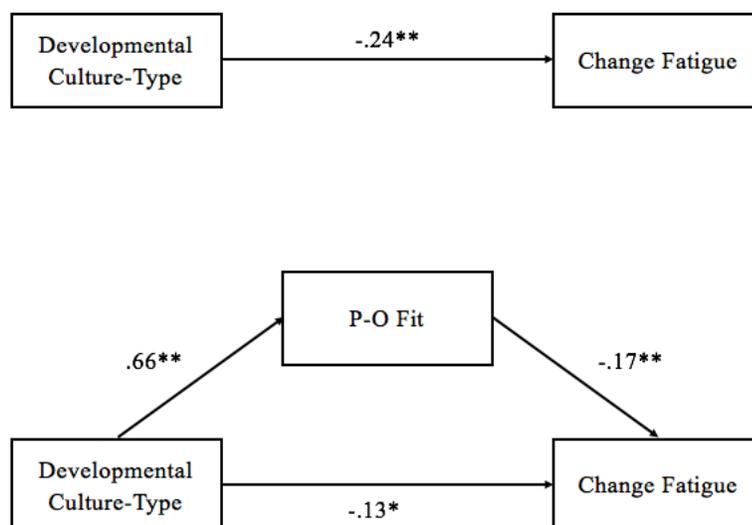


Figure 2. Model of mediation between group culture-type, P-O Fit, and change fatigue.

For the developmental culture-type, the regression model in which the independent variable of developmental culture predicted the mediator of subjective P-O fit was found to be significant ($F(1, 743) = 457.94, p < .001, R^2 = .38$). The regression model in which the developmental culture-type predicted the dependent variable of change fatigue was also significant ($F(1, 741) = 41.04, p < .001, R^2 = .05$). When both developmental culture-type and P-O fit were combined in a model to predict change fatigue, the overall model was significant ($F(2, 740) = 28.13, p > .001, R^2 = .27$) and the effect of the direct effect of the developmental-culture type was smaller than when developmental culture-type predicted change fatigue alone (i.e., total effect). This result

indicates that P-O fit partially mediated the relationship between the developmental culture-type and change fatigue. The indirect effect of this mediation is estimated at -.11.

See Figure 3 for a model of the results.

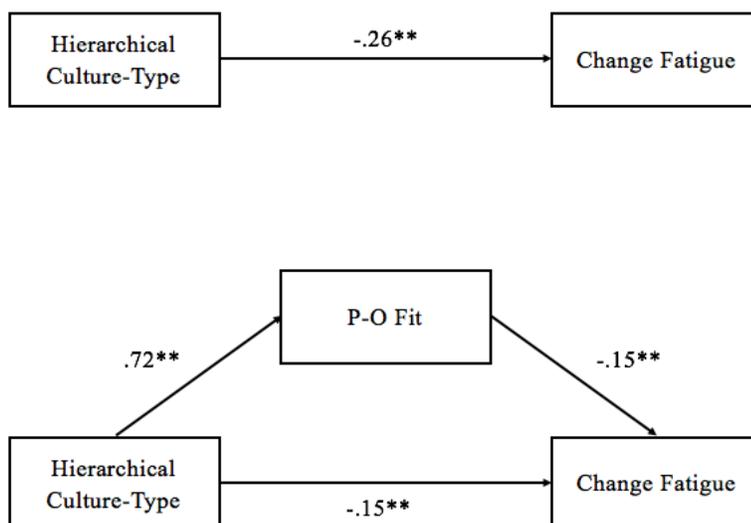


Note. ** $p < .01$, * $p < .05$

Figure 3. Model of mediation between developmental culture-type, P-O Fit, and change fatigue.

For the hierarchical culture-type, the regression model in which the independent variable of hierarchical culture predicted the mediator of subjective P-O fit was found to be significant ($F(1, 742) = 573.94, p < .001, R^2 = .66$). The regression model in which the independent variable of hierarchical culture predicted the dependent variable of change fatigue was also significant ($F(1, 739) = 46.71, p < .001, R^2 = .24$). When both hierarchical culture and P-O fit were combined in a model to predict change fatigue, the overall model was significant ($F(2, 738) = 29.10, p > .001, R^2 = .27$) and the direct effect of hierarchical culture was smaller than the total effect when hierarchical culture predicted change fatigue alone. This result indicates that P-O fit partially mediated the

relationship between the hierarchical culture-type and change fatigue. The indirect effect of this mediation is estimated at -.11. See Figure 4 for a model of the results.



Note. ** $p < .01$, * $p < .05$

Figure 4. Model of mediation between hierarchical culture-type, P-O Fit, and change fatigue.

Change Fatigue, Emotional Exhaustion, Turnover Intentions, and Organizational Commitment

Hypothesis 3, 4, and 5 sought to confirm previously established relationships between change fatigue and emotional exhaustion, turnover intentions, and organizational commitment. To test these hypotheses, Pearson's correlations ($\alpha = .05$) were conducted.

Hypothesis 3 expected change fatigue to be positively related to emotional exhaustion. A significant positive relationship was found between change fatigue and emotional exhaustion ($r = .48, p > .001$).

Hypothesis 4 expected change fatigue to be positively related to turnover intentions. Hypothesis 4a predicted that change fatigue would be positively related to job

turnover intentions (i.e., the intention to move from one professional education position to another). A significant positive relationship was found between change fatigue and job turnover intentions ($r = .31, p > .001$). Hypothesis 4b predicted that change fatigue would be positively related to career turnover intentions (i.e., the intention to leave professional education entirely). For teachers, a significant positive relationship was found between change fatigue and career turnover intentions ($r = .26, p > .001$). Conversely, no significant relationship was found between change fatigue and career turnover intentions for public school administrators ($r = .27, p = .13$).

Hypothesis 5 expected change fatigue to be negatively related to organizational commitment. A significant negative relationship was found between change fatigue and organizational commitment ($r = -.30, p > .001$).

Additional Withdrawal Behaviors and Attitudes

Because of the strong relationships between change fatigue, turnover intentions, and reduced organizational commitment, additional withdrawal behaviors and attitudes were attended to in the analysis of intercorrelations between variables. Pearson's correlations ($\alpha = .05$) were conducted to explore the relationship between change fatigue, amount of time educators take off work, and the degree of support educators give to change initiatives in their school settings (i.e., change support). In regard to time off work, study participants were asked to identify approximately how many days they had taken off work in the last 12 months because of feeling overwhelmed or emotionally exhausted. This figure showed a slight positive relationship with change fatigue ($r = .19, p < .001$). Of those who responded to this item, 100% reported taking at least one (1) day off because of feeling overwhelmed or emotionally exhausted and 22.4%

took four (4) or more days off. Change fatigue and change support had a strong negative relationship ($r = -.59, p < .001$).

CHAPTER IV: DISCUSSION

This study provides valuable insight into the impact of change fatigue on Tennessee's public-school educators and the role of school culture in addressing change fatigue. A first, foundational insight is that, with 86.4% of study participants scoring within the range of unfavorable scale means on change fatigue, the perception that too much change is occurring is pervasive among public school educators. The occurrence of layered change initiatives was also reported as extremely high among study participants. With layered change initiatives prevalent in the public-school system and a large percentage of educators experiencing change fatigue, the need to understand the causes and consequences of change fatigue is urgent. This discussion begins with a look at the possible consequences of change fatigue and their compounding impact on public school educators. This is followed by a conversation around what factors might help reduce the impact of change fatigue in public school.

Consequences of Change Fatigue for Public School Educators

This study found that change fatigue was positively related to emotional exhaustion, positively related to turnover intentions, and negatively related to organizational commitment among public school educators. These results replicate those of previous change fatigue research (Bernerth et al., 2011; Perel, 2015) and help to solidify the conceptualization of the symptoms of change fatigue. Further, this study found that levels of emotional exhaustion and turnover intentions were high among study respondents.

Emotional Exhaustion

Among study participants, 53.4% reported feeling emotionally exhausted at least once a week, with many participants feeling emotional exhaustion more frequently than once a week. Consistent with previous findings, emotional exhaustion showed a significant, positive relationship with change fatigue (Bernerth et al., 2011; Perel, 2015). Both this study's finding and the finding of previous research support the argument that the perception of too much change in a work setting can lead to emotional exhaustion for those experiencing the change. Worth special note in the public-school setting is the fact that the impact of this relationship extends beyond the educators themselves. Research has shown that emotional exhaustion among educators is associated with reduced levels of student achievement on both classroom tasks and standardized tests (Arens & Moren, 2016; Klusmann, Richter, & Lüdtke, 2016). As such, change fatigue can have serious consequences for educators, the students they teach, and the schools in which they work.

It is also important to recognize that the effects of emotional exhaustion are broad. Both Bernerth et al. (2011) and Perel (2015) found that emotional exhaustion fully mediated the relationship between change fatigue and turnover intentions and partially mediated the relationship between change fatigue and organizational commitment. In other words, the presence of emotional exhaustion helped explain why participants expressed increased turnover intentions and reduced organizational commitment as a result of change fatigue. While the present study did not explore this mediation, correlation analyses presented above also show strong, positive relationships between emotional exhaustion, increased turnover intentions, and reduced organizational commitment (See Table 4). This suggests that, in addition the negative impact of

emotional exhaustion in isolation, it is likely that increased turnover intention and reduced organizational commitment in public schools are among the consequences of its presence among educators.

Turnover Intentions

This study found that job turnover intentions and career turnover intentions both had a relationship with change fatigue. While previous studies exploring the relationship between turnover intentions and change fatigue have only measured what is referred to here as job turnover intentions, this study mirrors the work of the National Center for Education Statistics by distinguishing two forms of turnover—those who change jobs within the field of education (i.e., movers) and those who leave their education profession entirely (i.e., leavers) (U.S. Department of Education, 2015). The job turnover intention scale aimed to predict the behavior of movers, while the career turnover intention scale aimed to predict the behavior of leavers.

Job turnover intentions were strikingly high among study participants with 34.4% of participants' mean scores falling within the unfavorable range and an additional 6.8% of participants' mean scores falling within the neutral range. A neutral response on this scale is cause for concern, because if an employee is not sure whether or not they want to leave their job, they should be considered vulnerable to turnover. Taken together, over 40% of respondents reported some vulnerability to job turnover. Again, job turnover intentions were found to have a positive relationship with change fatigue, supporting findings in previous research that employees who think too much change is occurring are more likely to leave their jobs (Bernerth et al., 2011; Perel, 2015). With such high levels of job turnover intentions, the effects of change fatigue should not be ignored.

This study's finding around educator turnover continue to be concerning in regard to career turnover intentions. Career turnover intentions were equally as high as job turnover intentions. To provide a point of reference for these exceptional results, the National Center for Education Statistics reported that, as of 2013, 8% of teachers in the United States were leaving their profession every year (U.S. Department of Education, 2015). Among our sample of public-school teachers in Tennessee, 32.1% fell within the unfavorable range for career turnover intentions, and an additional 9.0% fell in the neutral range. This brings the total of teachers in our sample vulnerable to career turnover to over 40%, nearly identical to those reporting job turnover intentions. Among public school administrators, the numbers were slightly smaller but still quite substantial—18.2% of administrators fell within the unfavorable range for career turnover intentions, and an additional 9.1% fell in the neutral range, bringing those administrators vulnerable to career turnover to over 27%. Within this context, understanding the impact of change fatigue on career turnover intentions is vital.

For teachers, a positive relationship was found between career turnover intentions and change fatigue. This means that as change fatigue increased, teachers were more likely to express intentions to leave their careers entirely. This result expands previous change fatigue research by specifically addressing the likelihood of an employee leaving their career entirely, and supports the proposition that change fatigue is having a major, negative impact on public-school teachers. For administrators, no significant relationship was found between career turnover intentions and change fatigue. Two explanations for this finding should be considered. First, it is possible that the context of administrators is different enough from the context of teachers, both in times of change and in times of

stability (e.g., higher work locus of control, higher compensation, more complete knowledge of change initiatives), that change fatigue actually does *not* have the same kind of relationship with career turnover intentions. In this case, these findings should be replicable in future studies. The second possibility is that this finding is a statistical artifact. Because of the small sample size of administrators in this study, it may be that there was simply not enough power to detect the relationship between change fatigue and career turnover intentions for administrators, despite the correlation coefficient being similar to that reported for teachers. If this is the case, future studies with larger sample sizes may find a correlation between change fatigue and career turnover intentions among administrators. No matter which explanation is true, the lack of a definitive answer limits the generalizability of this finding at this time.

Organizational Commitment

Organizational commitment was the final employee attitude explored in this study. Organizational commitment among public school educators was high, with 75.2% falling within the favorable range for mean scale scores. Even so, change fatigue was found to have a significant, negative relationship with organization commitment. This finding supports previous research, which also reported a negative relationship between organizational commitment and change fatigue (Bernerth et al., 2011; Perel, 2015). So, while levels of organizational commitment are good, change fatigue likely has a deteriorating effect on this positive employee attitude.

Reduced Support for Change

In addition to the three consequences of change fatigue addressed directly by this study's hypotheses, change fatigue was also found to have a strong, negative relationship

with change support among teachers and administrators. As such, support for current change initiatives among teachers and administrators eroded as change fatigue increased. This makes intuitive sense. If you perceive that too much change is occurring, you are likely to withhold support for new change initiatives. This is an important finding in an environment saturated with change initiatives. The effectiveness of change initiatives may decrease in public-schools as change fatigue increases because change initiatives no longer have the educator support needed for success.

Causes of Change Fatigue in Public Schools

School Culture-Type

The group culture-type, the developmental culture-type, and the hierarchical culture-type were all found to have a significant, negative relationship with change fatigue in public schools while no significant relationship was found between the rational culture-type and change fatigue. The negative relationships between group and developmental culture-types and change fatigue supported the hypotheses. In contrast, the non-significant relationship between the rational culture-type and change fatigue and the negative relationship between the hierarchical culture-type and change fatigue were not anticipated.

For the group and developmental culture-types, this study's findings were accurately predicted and aligned with previous research. Perel (2015) also found that the group culture-type was negatively related to change fatigue. Previous research had not found a significant relationship between the developmental culture-type and change fatigue (Perel, 2015). However, prevailing thought around this relationship predicted, both in the current and previous studies, that the relationship with change fatigue would

be negative. This prediction was based on the theoretical structure of Quinn and Rohrbaugh's (1981) Competing Values Framework in which the group culture-type and the developmental culture-type are both characterized by relatively flexible structures (See Figure 1). In regard to change, it follows logically that the flexibility valued by both group and developmental culture-types would reduce the impact of change fatigue within organizations. Our findings support this theoretical proposition.

While previous research found a significant positive relationship between the rational culture-type and change fatigue (Perel, 2015), this study found no significant relationship. It is unclear why this study's findings differ from previous studies' findings on change fatigue. One explanation for this discrepancy is that the public-school context is notably different than the settings in which previous studies were conducted. However, it is unclear which specific differences might impact the relationship between the rational culture-type and change fatigue. Another explanation for the discrepancy between present and previous findings may be the restriction of range on the mean ratings of the rational culture-type within this study's sample. The mean score for the rational culture-type within schools was higher than any other culture type, and variance was limited. This restriction of range may have made it more difficult to detect significant effects. Additional research is needed to clarify the relationship between the rational culture-type and change fatigue.

Finally, a significant, negative relationship was found between the hierarchical culture-type and change fatigue. This finding opposed the hypothesized relationship and, as such, is important to consider further. Though previous studies have not found a significant relationship between hierarchical culture-type and change fatigue (Perel,

2015), the prediction of a positive relationship was made in both past studies and the present study. This prediction was made on the theoretical basis that, because the hierarchical culture-type falls on the control side of the control-flexibility spectrum within the Competing Values Framework, it would relate to change fatigue in the same manner as its control-seeking neighbor, the rational culture-type.

One potential explanation for this opposite finding may involve the source of change initiatives within public schools. Though not directly requested, several participants reached out to provide additional written comments after completing the study's online survey. A common clarification offered through qualitative comments was that the sources of change initiatives in schools are most often external to the schools themselves. One respondent wrote that "The change that we experience at my school is a direct result of the changes occurring at the federal, state, and district level." Another respondent commented that "It's the people from the board who cause the stress, not peers or even the principal..." These comments suggest that the source of change initiatives plays an important role in the relationship between school culture and teacher change fatigue.

When frustration builds around layered or otherwise extensive change initiatives, the *source* of change is a likely target of this frustration. When changes are initiated within an organization, internal leadership may be on the receiving end of these negative responses. This would surely be expected in an organization with hierarchical tendencies, in which the same leaders initiating changes are, in times of stability, demanding order and predictability. The contrast between the hierarchical culture-type and layered change,

as well as frustration with the leaders initiating change, is a recipe for employee exhaustion.

However, this interaction may look different when changes are initiated external to an organization. In this scenario, frustration with layered or otherwise extensive change would be directed at the external powers responsible for the change. For organizations with hierarchical tendencies, the internal cultural focus on order and control may actually provide a sense of stability and support during uncertain times. Further, the internal leaders who value control and formal power during times of stability may be perceived as allies in protecting the organization from incoming, involuntary change. Now, instead of being the target of frustration, internal hierarchical leaders are valued for supporting employees as they collectively wrestle with changes originating outside of the organization. The strong, positive relationship found in this study between the hierarchical culture-type and supervisor satisfaction provides initial evidence that this relationship may exist.

The interaction between externally driven changes and internal hierarchy offer a possible explanation for why the hierarchical culture-type was negatively related to change fatigue in this study. When change is coming from outside of an organization, as it often is in the public-school system, a strong, supportive culture inside the organization may serve as a buffer against change fatigue. To further explore these hypotheses, future research could test a moderation model in which the source of change initiatives (on an internal/external spectrum) moderates the relationship between organizational culture-type and change fatigue. Future research could also directly explore the relationship

between supervisor and organizational supportiveness and the occurrence of change fatigue.

Overall, these results suggest that the group, developmental, and hierarchical culture-types within public schools may help reduce the impact of change fatigue on public school educators. Because of their buffering effect, establishing and supporting these kinds of cultures within public school should be seen as a macro-level investment in protecting the well-being of teachers and administrators in an environment of perpetual change.

Strength and Supportiveness of Culture

Beyond the hypothesized relationship between culture-types and change fatigue, there is some initial evidence that the overall strength and supportiveness of an organization's culture matters in a public-school setting. As show in Table 4, all four culture-types were negatively related to change fatigue, turnover intentions, and emotional exhaustion. All four culture-types were also positively related to organizational commitment, change support, and supervisor satisfaction. In other words, positive outcomes increased and negative outcomes decreased as strength of culture increased. One potential explanation for these relationships is that, when changes originates externally (as they so often do in public schools), strong organizational culture provides a sense of protection and security for internal organizational members. In this context, all cultures may be perceived as supportive, no matter their nature. The positive relationship between organization culture-types and supervisor satisfaction is also noteworthy. This finding suggests that, to maximize the benefits of a strong culture, supportive leadership is vitally needed within schools. This study provides initial evidence that a supportive

leader in a supportive climate can make great strides in protecting educators from change fatigue. To expand on these initial findings, future research should explore how the strength of culture overall is related to change fatigue when the sources of organizational change are external, as well as how supportive leaders maximize the benefits of strong cultures.

Mediating Effects of Perceived Person-Organization (P-O) Fit

Perceived P-O fit may provide another way to prevent or alleviate change fatigue in an environment rich with change. Perceived P-O fit was found to partially mediate the relationship between developmental and hierarchical culture-types and the experience of change fatigue among educators. P-O fit had no mediating effect on the relationship between school culture and change fatigue for the group culture-type.

While previous research has found that P-O fit is positively related to job satisfaction and organizational commitment and negatively related to turnover intentions and work stress (Kristof, 1996; Posner, 2010; Wei, 2015), the testing of this specific mediation model and P-O fit's relationship to change fatigue was exploratory. The model was designed to test the idea that a teacher/administrator who is well-matched to his/her school may experience less change fatigue than a teacher/administrator who is not well-matched to his/her school. It is within this context that the results are interpreted.

The partial mediations found within the developmental and hierarchical culture-types suggest that, for organizations with elements of these cultures, employees whose values match the values of their organization may experience less change fatigue than employees in organizations with mismatched values. In other words, P-O fit may provide another source of protection from change fatigue and maximize the benefits of these

culture-types. The practical implication of this finding is that achieving P-O fit within schools may be a valuable asset in contexts of change. P-O fit can be achieved by hiring teachers and administrators who fit a school's culture, by onboarding all hires properly to assimilate them into the school's culture, or by building a school's culture around the values of the current staff.

In the group-culture type, no mediation of P-O fit was found between culture-type and change fatigue. This finding is important because it suggests that the benefits of the group culture-type are cross-cutting—regardless of whether an individual employee identifies personally with the group-culture type, it is likely that being within such a culture will reduce change fatigue. Thus, less consideration can be given to individual P-O fit in group cultures because employees are likely to experience positive outcomes regardless of fit. This makes the group-culture type an especially appealing option for schools if one goal is to reduce educator change fatigue.

Limitations and Future Research

This study has supported previous research findings on the consequences of change fatigue, raised several important questions on the role of school culture on educator change fatigue, and introduced P-O fit as a mediator in the relationship between school culture and change fatigue. There are many opportunities to expand upon and clarify the findings presented here. Given the exceptionally high levels reported by this study's sample, future research should work to directly identify and address the combined causes of emotional exhaustion and turnover intentions among public-school educators. This study identifies change fatigue as one contributing factor, but it is not solely responsible.

This study's findings concerning the rational culture-type and its effects of change fatigue were inconclusive. Future studies should continue to explore how this culture-type is related to change fatigue. It could be that high levels of rational culture-types are characteristics of many schools, so that researchers need to collect data in a different setting to address the restriction of range encountered in this sample.

Future studies should also explore how the source of organizational change (internal/external) is related to the experience of change fatigue at an individual level. A moderation model in which the source of organizational change moderates the relationship between organizational culture and change fatigue may exist. When change does originate outside of the organization, as is the case in public-schools, future research should explore how the strength of organizational culture and the supportiveness of leaders is related to employee change fatigue. While this study found indirect evidence suggesting that strong, supportive cultures of all types provide some protection from negative employee outcomes, the nature of the relationship between culture strength, supervisor supportiveness, and change fatigue merits direct study. Finally, all analyses performed for this study were correlational. While there is evidence to support the assumptions made in our results and discussion, future studies should further explore directionality of the relationships described here.

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APPENDICES

APPENDIX A

Competing Values Scale of Organizational Culture

Instructions: Listed below are things that might be valued by your school. Please use the scale ("Not Valued at All" to "Extremely Valued") to describe the extent to which each of the following values are operating and emphasized in your school **as a whole**. You can skip **any** question you are not sure how to answer.

To what degree is each of the following valued by your school?

1=*Not Valued at All*

2=*Of Little Value*

3=*Moderately Valued*

4=*Very Valued*

5=*Extremely Valued*

Group Culture	Participation and Open Discussion
	Employee concerns and ideas
	Teamwork and Cohesion
	Morale
Hierarchical Culture	Predictable Outcomes
	Stability and continuity
	Order
	Dependability and reliability
Developmental Culture	Innovation and change
	Creative problem solving
	Decentralization
	New ideas
Rational Culture	Outcome excellence and quality
	Getting the job done
	Goal achievement
	Doing one's best

APPENDIX B

Change Fatigue Measure

Instructions: Please indicate your level of agreement with the statements below.

1. Too many change initiatives are introduced at my school
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
2. I am tired of all the changes in this school.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
3. The amount of change that takes place at my school is overwhelming.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
4. We are asked to change too many things at my school.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
5. It feels like we are always being asking to change something around here.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
6. I would like to see a period of stability before we change anything else in this school.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

APPENDIX C

Person-Organization Fit Measure

1. To what degree do you feel your values ‘match’ or fit this school and the current employees in this school?
 - A. Not at all
 - B. Not very much
 - C. Neutral
 - D. Somewhat
 - E. Completely

2. Do you think the values and “personality” of this school reflect your own values and personality?
 - A. Not at all
 - B. Not very much
 - C. Neutral
 - D. Somewhat
 - E. Completely

3. My values match those of the current employees in this school.
 - A. Not at all
 - B. Not very much
 - C. Neutral
 - D. Somewhat
 - E. Completely

APPENDIX D

Emotional Exhaustion Measure

Instructions: Please indicate how often you experience the following:

1. I feel emotionally drained from my work
 - A. Never
 - B. A few times per year
 - C. Once a month
 - D. A few times a month
 - E. Once a week
 - F. A few times a week
 - G. Every day

2. I feel used up at the end of the workday
 - A. Never
 - B. A few times per year
 - C. Once a month
 - D. A few times a month
 - E. Once a week
 - F. A few times a week
 - G. Every day

3. I feel fatigued when I get up in the morning and have to face another day on the job
 - A. Never
 - B. A few times per year
 - C. Once a month
 - D. A few times a month
 - E. Once a week
 - F. A few times a week
 - G. Every day

4. Working with people all day is really a strain for me
 - A. Never
 - B. A few times per year
 - C. Once a month
 - D. A few times a month
 - E. Once a week
 - F. A few times a week
 - G. Every day

5. I feel burned out from my work
 - A. Never
 - B. A few times per year
 - C. Once a month
 - D. A few times a month
 - E. Once a week
 - F. A few times a week
 - G. Every day

6. I feel frustrated by my job
 - A. Never
 - B. A few times per year
 - C. Once a month
 - D. A few times a month
 - E. Once a week
 - F. A few times a week
 - G. Every day

7. I feel I'm working too hard on my job
 - A. Never
 - B. A few times per year
 - C. Once a month
 - D. A few times a month
 - E. Once a week
 - F. A few times a week
 - G. Every day

8. Working with people directly puts too much stress on me
 - A. Never
 - B. A few times per year
 - C. Once a month
 - D. A few times a month
 - E. Once a week
 - F. A few times a week
 - G. Every day

9. I feel like I'm at the end of my rope
 - A. Never
 - B. A few times per year
 - C. Once a month
 - D. A few times a month
 - E. Once a week
 - F. A few times a week
 - G. Every day

APPENDIX E

Organizational Commitment Measure

Instructions: Please indicate your level of agreement with the statements below.

1. I talk up my school to my friends as a great place to work.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

2. I would accept almost any type of job assignment in order to keep working at my school.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

3. I find that my values and the school's values are very similar.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

4. I am proud to tell others that I am part of my school.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

5. I am willing to put in a great deal of effort in order to help my school be successful.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

6. My school really inspires my best job performance.
- A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
7. I am extremely glad that I chose my current school over others I was considering at the time I joined.
- A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
8. I really care about the fate of my school.
- A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
10. For me, this is the best of all possible schools for which to work.
- A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

APPENDIX F

Job Turnover Intentions Measure

Instructions: Please indicate your level of agreement with the statements below in regard to working at your current school.

1. I am actively looking for a job outside my current school.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

2. As soon as I can find a better job, I'll leave my current school.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

3. I am seriously thinking about quitting my job.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

4. I often think about quitting my job at my current school.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

5. I think I will be working at my current school five years from now. *
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

**Reverse scored*

APPENDIX G

Career Turnover Intentions Measure

Instructions: Please indicate your level of agreement with the statements below in regard to **your career in teaching/public school administration.**

1. I am actively looking for a job outside of teaching/ public school administration.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

2. As soon as I can find a better job, I'll leave teaching/public school administration entirely.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

3. I am seriously thinking about quitting teaching/public school administration.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

APPENDIX H

Layered Change Measure

Instructions: Please indicate your level of agreement with the statements below concerning your current school.

1. We usually wait to see the results of one change initiative before we implement a new change initiative. *
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

2. When a major change comes, we see it through to the end. *
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

3. We **don't** give changes initiatives enough time to develop to see if they are effective.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

4. There is long-term follow-through with change initiatives at my school. *
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

5. New change initiatives make it difficult to follow through on older change initiatives.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

6. Things change so quickly in my school that I don't feel like I can become an expert before moving onto the next thing.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

**Reverse scored*

APPENDIX I

Change Support Measure

Instructions: Please indicate your level of agreement with the statements below concerning your current school.

1. Too many of the changes at my school have not been worth my time. *
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

2. Most of the changes occurring at my school are unnecessary. *
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

3. Most of the changes happening at my school do not really make a real difference. *
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

4. Most of the changes happening at my school make it a better place.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

5. I support most of the changes happening at my school.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

6. Supporting the changes happening in our school should be a priority for teachers.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

**Reverse scored*

APPENDIX J

Supervisor Satisfaction Measure

Instructions: Please indicate how satisfied you are with each aspect of your job described below.

1. The degree of respect and fair treatment I receive from my principal.
 - A. Extremely Dissatisfied
 - B. Dissatisfied
 - C. Neutral
 - D. Satisfied
 - E. Extremely Satisfied

2. The amount of support and guidance I receive from my principal.
 - A. Extremely Dissatisfied
 - B. Dissatisfied
 - C. Neutral
 - D. Satisfied
 - E. Extremely Satisfied

3. The overall quality of supervision I receive in my work.
 - A. Extremely Dissatisfied
 - B. Dissatisfied
 - C. Neutral
 - D. Satisfied
 - E. Extremely Satisfied

APPENDIX K

Days Off Work Measure

1a. About how many personal days off have you taken in the last 12 months because of feeling overwhelmed or emotionally exhausted?

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16
- 17
- 18
- 19
- 20
- 20+

1b. Is this more days, fewer days, or about the same number of days as the year before?

- A. More
- B. Less
- C. About the Same
- D. Not Applicable or Do Not Know

APPENDIX L

Work Locus of Control Measure

Instructions: The following statements are about your opinion of **jobs in general** (i.e., not only jobs in education or jobs at your school). Please indicate your level of agreement with the statements below.

1. A job is what you make of it.*
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

2. On most jobs, people can pretty much accomplish whatever they set out to accomplish.*
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

3. If you know what you want out of a job, you can find a job that gives it to you.*
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

4. If employees are unhappy with a decision made by their boss, they should do something about it.*
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

5. Getting the job you want is mostly a matter of luck.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

6. Making money is primarily a matter of good fortune.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

7. Most people are capable of doing their jobs well if they make the effort. *
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

8. In order to get a really good job you need to have family members or friends in high places.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

9. Promotions are usually a matter of good fortune.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

10. When it comes to landing a really good job, who you know is more important than what you know.
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

11. Promotions are given to employees who perform well on the job.*
 - A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

12. To make a lot of money you have to know the right people.
- A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
13. It takes a lot of luck to be an outstanding employee on most jobs.
- A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
14. People who perform their jobs well generally get rewarded for it. *
- A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
15. Most employees have more influence on their supervisors than they think they do.*
- A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree
16. The main difference between people who make a lot of money and people who make a little money is luck.
- A. Strongly Disagree
 - B. Disagree
 - C. Neither agree or disagree
 - D. Agree
 - E. Strongly Agree

**Reverse Scored*

APPENDIX M

Demographic Items

1. How do you classify your position at your current school?
 - A. Regular full-time teacher (in any of grades Kindergarten-12 or comparable ungraded levels)
 - B. Regular part-time teacher (in any of grades Kindergarten-12 or comparable ungraded levels)
 - C. Administrator (e.g., principal, assistant principal, director, school head)
 - D. Other _____

2. In what grades do you spend most of your teaching time during the school year?
 - A. Pre-K or Early Childhood
 - B. Kindergarten-5th grade
 - C. 6th-8th grade
 - D. 9-12th grade
 - E. Other _____

3. How old are you?
 - A. 18-24
 - B. 25-34
 - C. 35-44
 - D. 45-54
 - E. 55 years old or older

4. How many school years have you worked (as a teacher, administrator, or staff) at your **CURRENT** school?
 - A. Under two years
 - B. 2-4 years
 - C. 5-9 years
 - D. 10-15 years
 - E. 15 or more years

5. How many school years have you worked (as a teacher, administrator, or staff) **IN PUBLIC SCHOOLS**?
 - A. Under two years
 - B. 2-4 years
 - C. 5-9 years
 - D. 10-15 years
 - E. 15 or more years

6. Does your school, district, or school system offer tenure?
 - A. Yes
 - B. No
 - C. Do Not Know

7. Are you tenured at your current school, district, or school system?
 - A. Yes
 - B. No
 - C. Do Not Know

8. Are you the parent or legal guardian of any school-age children (K-12)?
 - A. Yes
 - B. No

9. How did you hear about this survey?
 - A. TEA Announcement
 - B. Referral from a friend
 - C. Facebook or other Social Media
 - D. Other _____

10. What percentage of students in your school receive free or reduced-price lunches?

If you aren't sure of the percentage of students receive free and reduced-price lunches at your school, click [here](#) to visit greatschools.org and look up your school.

- 1) Once on the site, enter your school name in the search bar under "Find a Great School."
- 2) When you find your school, click on the school name.
- 3) Click on "Details" on the horizontal menu.
- 4) Click "Students" on the vertical menu on the left side of the screen.
- 5) Look at "Students by Group." Under this heading you will find a row for "Students participating in a free or reduced-price lunch program" with the percentage listed.
 - A. 0-10%
 - B. 10-25%
 - C. 25-50
 - D. 50-75%
 - E. Greater than 75%
 - F. Do Not Know

APPENDIX N

Invitation to Participate in Study

Dear TEA member,

Have you heard the term “change fatigue”? It is a concept being studied by two researchers at Middle Tennessee State University. In particular, they are studying how constant changes and reforms in public education in Tennessee are affecting public school educators and school cultures.

TEA believes this is an important study that could transform the way Tennessee moves forward with changes to education policy. Please take a few minutes to complete the survey at the link below. Your responses will be kept completely anonymous, so please be open and honest in your answers. **The survey will close on February 15.**

Participate by **clicking on this link**. If clicking on the link does not open the survey, copy the link and paste the link into your web browser:

https://mtsupsychology.az1.qualtrics.com/SE/?SID=SV_6DpK1vVmehpOgRf

Thank you for your commitment to Tennessee students. I appreciate all that you do.

Sincerely,

Barbara Gray, President
Tennessee Education Association

APPENDIX O

Table 6
Intercorrelations Among Demographic and Non-Demographic Variables

		Years at Current School	Years in Public Schools	% Free/Reduced Lunch Recipients
	N	743	745	670
1. Change Fatigue	749	.13**	.04	.07
2. Group Culture	752	-.05	-.06	-.01
3. Developmental Culture	745	.02	-.01	-.03
4. Rational Culture	751	-.01	-.01	-.05
5. Hierarchical Culture	744	-.01	-.02	-.03
6. Subjective P-O Fit	749	.02	.01	-.04
7. Job Turnover Intentions	747	-.05	-.06	.02
8. Career Turnover Intentions-Teachers	708	.00	.01	.06
9. Career Turnover Intentions-Admin	33	.28	.23	-.12
10. Emotional Exhaustion	751	.02	.00	.05
11. Organizational Commitment	751	.01	-.01	-.03
12. Layered Change	746	.10**	.05	.07
13. Change Support	743	-.09*	-.07	-.04
14. Supervisor Satisfaction	713	-.06	-.05	.00
15. Days Off	710	.00	-.03	.03
16. Work Locus of Control	748	-.07	-.09*	-.11**

Note: ** $p < .01$, * $p < .05$

APPENDIX P

Work Locus of Control Preliminary Analyses

Table 7

Descriptive Statistics for Work Locus of Control

Variable	<i>n</i>	Mean	SD	Min	Max
Work Locus of Control	748	3.38	0.49	1.88	5.00

Table 8

Scale Reliability for Work Locus of Control

Scale	Cronbach's Alpha	Number of Items
Work Locus of Control	0.84	16

Table 9

Variable Correlations with Work Locus of Control (LOC)

Variable	Correlation with Work LOC
Change Fatigue	-.20**
Group Culture	.30**
Developmental Culture	.26**
Rational Culture	.14**
Hierarchical Culture	.25**
Subjective P-O Fit	.27**
Job Turnover Intentions	-.32**
Career Turnover Intentions- Teachers	-.33**
Career Turnover Intentions- Admin	-.36**
Emotional Exhaustion	-.32**
Organizational Commitment	.30**
Layered Change	-.21**
Change Support	.35**
Supervisor Satisfaction	.24**
Days Off Work	-.16**

Note. ** $p < .001$

APPENDIX Q

IRB Approval Letter

IRB
INSTITUTIONAL REVIEW BOARD
 Office of Research Compliance,
 010A Sam Ingram Building,
 2269 Middle Tennessee Blvd
 Murfreesboro, TN 37129



IRBN007 – EXEMPTION DETERMINATION NOTICE

Tuesday, January 24, 2017

Investigator(s): Erin Leuschke (PI), and Patrick McCarthy (FA)
 Investigator(s) Email(s): eem3d@mtmail.mtsu.edu
 Department: Psychology Department

Study Title: School Culture and Teacher Change Fatigue in Tennessee
 Protocol ID: 17-1126

Dear Investigator(s),

The above identified research proposal has been reviewed by the MTSU Institutional Review Board (IRB) through the **EXEMPT** review mechanism under 45 CFR 46.101(b)(2) within the research category (2) *Educational Tests*. A summary of the IRB action and other particulars in regard to this protocol application is tabulated as shown below:

IRB Action	EXEMPT from further IRB review***	
Date of expiration	NOT APPLICABLE	
Participant Size	Sample size will be at least in the hundreds.	
Participant Pool	Public school teachers or administrators	
Mandatory Restrictions	All participants need to consent.	
Additional Restrictions	18 years of age or older	
Comments	N/A	
Amendments	Date N/A	Post-Approval Amendments None

***This exemption determination only allows above defined protocol from further IRB review such as continuing review. However, the following post-approval requirements still apply:

- Addition/removal of subject population should not be implemented without IRB approval
- Change in investigators must be notified and approved
- Modifications to procedures must be clearly articulated in an addendum request and the proposed changes must not be incorporated without an approval
- Be advised that the proposed change must comply within the requirements for exemption
- Changes to the research location must be approved – appropriate permission letter(s) from external institutions must accompany the addendum request form
- Changes to funding source must be notified via email (irb_submissions@mtsu.edu)
- The exemption does not expire as long as the protocol is in good standing
- Project completion must be reported via email (irb_submissions@mtsu.edu)

- Research-related injuries to the participants and other events must be reported within 48 hours of such events to compliance@mtsu.edu

The current MTSU IRB policies allow the investigators to make the following types of changes to this protocol without the need to report to the Office of Compliance, as long as the proposed changes do not result in the cancellation of the protocols eligibility for exemption:

- Editorial and minor administrative revisions to the consent form or other study documents
- Increasing/decreasing the participant size

The investigator(s) indicated in this notification should read and abide by all applicable post-approval conditions imposed with this approval. [Refer to the post-approval guidelines posted in the MTSU IRB's website](#). Any unanticipated harms to participants or adverse events must be reported to the Office of Compliance at (615) 494-8918 within 48 hours of the incident.

All of the research-related records, which include signed consent forms, current & past investigator information, training certificates, survey instruments and other documents related to the study, must be retained by the PI or the faculty advisor (if the PI is a student) at the secure location mentioned in the protocol application. The data storage must be maintained for at least three (3) years after study completion. Subsequently, the researcher may destroy the data in a manner that maintains confidentiality and anonymity. IRB reserves the right to modify, change or cancel the terms of this letter without prior notice. Be advised that IRB also reserves the right to inspect or audit your records if needed.

Sincerely,

Institutional Review Board
Middle Tennessee State University

Quick Links:

[Click here](#) for a detailed list of the post-approval responsibilities.
More information on exempt procedures can be found [here](#).