ACADEMY OF Management Review

The Impact of Temporal Schemata: Understanding When Individuals Entrain versus Resist or Create Temporal Structure

Journal:	*Academy of Management Review*
Manuscript ID	AMR-2017-0384-Original.R3
Manuscript Type:	Original Manuscript
Topic Areas:	Attitudes, cognitions, and affect (General) < Attitudes, cognitions, and affect < Organizational Behavior, Interpretive processes < Managerial and Organizational Cognition, Behavior (General) < Behavior < Organizational Behavior, Coordination < Group/team processes < Organizational Behavior
Theoretical Perspectives:	Time, Psychology (Individual), Micro-OB (General)
Abstract:	As the pace of contemporary work increases, organizations seek to coordinate their employees' efforts, particularly through the temporal coordination of pace and rhythm. Yet little research has examined individual cognition, affect, and behavior in response to the "pull" of entrainment to an organization's temporal structure. In this paper, we develop theory highlighting how individuals use temporal schemata—cognitive frameworks about time—to interpret and respond to temporal cues provided by an organization's temporal structure (i.e., "push back"). We propose that individuals can automatically or deliberately entrain, actively or passively resist, or create additional temporal structure. By identifying how individuals compare temporal cues against their temporal schemata within a situation, we develop a temporal cognitive-affective processing model to explain how individuals navigate the tension between their individualized view of time and social pressures for coordination. This model emphasizes the underdeveloped individual-level aspects of entrainment, contributing to future research by demonstrating that, in contrast to prior research: 1) entrainment varies in degree and type, 2) entrainment (or lack thereof) is both cognitive and affective, and 3) entrainment may not be sustained.

The Impact of Temporal Schemata: Understanding When Individuals Entrain versus Resist or Create Temporal Structure

Abbie J. Shipp
Professor of Management
Texas Christian University
2932A Merida Ave, #207
Fort Worth, TX 76129
817.257.7558
a.shipp@tcu.edu

Hettie A. Richardson
Professor of Management
Texas Christian University
h.richardson@tcu.edu

Author note: The authors would like to thank our editor, Dr. Sherry Thatcher, and three anonymous reviewers for their excellent feedback during the development of this paper. We would also like to thank Karen Jansen, Mary Waller, and Andrew Knight as well as faculty and students at University of Texas, University of Virginia, University of Memphis, and Texas Christian University for their feedback on previous iterations of this paper. An earlier version of this paper was presented at the 75th Annual Meeting of the Academy of Management (Vancouver). Correspondence should be sent to the first author at a.shipp@tcu.edu.

Abstract

As the pace of contemporary work increases, organizations seek to coordinate their employees' efforts, particularly through the temporal coordination of pace and rhythm. Yet little research has examined individual cognition, affect, and behavior in response to the "pull" of entrainment to an organization's temporal structure. In this paper, we develop theory highlighting how individuals use temporal schemata—cognitive frameworks about time—to interpret and respond to temporal cues provided by an organization's temporal structure (i.e., "push back"). We propose that individuals can automatically or deliberately entrain, actively or passively resist, or create additional temporal structure. By identifying how individuals compare temporal cues against their temporal schemata within a situation, we develop a temporal cognitive-affective processing model to explain how individuals navigate the tension between their individualized view of time and social pressures for coordination. This model emphasizes the underdeveloped individual-level aspects of entrainment, contributing to future research by demonstrating that, in contrast to prior research: 1) entrainment varies in degree and type, 2) entrainment (or lack thereof) is both cognitive and affective, and 3) entrainment may not be sustained.

Keywords: Time, temporal, schemata, entrainment, coordination, structure, individual-level, cognition, affect, cognitive-affective processing model

In modern team-based organizations, employee coordination and synchronization are more important than ever to achieve complex goals, such as the on-time launch of a new product. Organizational leaders typically use temporal structures (e.g., deadlines) to provide temporal cues that create coordination norms (e.g., Bluedorn, 2002; McGrath & Rotchford, 1983; Okhuysen & Waller, 2002; Orlikowski & Yates, 2002; Perlow, 1999) and facilitate the opportunity for *entrainment*—the "adjustment of the pace or cycles of an activity to match or synchronize with that of another activity" (Ancona & Chong, 1996: 253). For example, when a company launches new products annually, employees from design, production, and marketing (among others) must synchronize their efforts around this yearly cycle. This kind of entrainment often occurs naturally as individuals fall into the rhythm and tempo of the temporal structure in which they are embedded (Ancona & Chong, 1996; McGrath & Kelly, 1986). For instance, McGrath, Kelly, and Machatka state that "*individuals 'attune' their rates of work to fit the temporal conditions of their work situations…*our lives are strongly entrained to temporal rhythms, not of our own making and often not noticed" (1984: 31-36).

However, given the persistence of coordination challenges (Claggett & Karahanna, 2018; Okhuysen & Bechky, 2009), entrainment appears to be imperfect. Even when subjected to the same temporal structures, individuals potentially vary in their entrainment behaviors (cf. Ancona & Waller, 2007; Perlow, 1999). Although individuals sometimes entrain automatically, other times they "march to the beat of their own drums." For instance, employees might work at their own pace (e.g., Blount & Janicik, 2002; Leroy, Shipp, Blount, & Licht, 2015), or they may recognize the need for additional temporal structure to keep personal progress on track (e.g., Dai, Milkman, & Riis, 2014). By resisting or creating new rhythms of work, individuals may change and/or augment organizational temporal structures rather than simply reinforce them. Yet, because entrainment theory to date has predominantly focused on groups and organizations (Ancona & Chong, 1999; Blount & Janicik, 2002; McGrath et al., 1984; Orlikowski & Yates, 2002; Perlow, 1999), we have little information about the individual path to entrainment (or lack

thereof). This is critical because without individual-level theory, we cannot predict when a given employee will or will not entrain, nor when entrainment will be sustained versus temporary. If we cannot understand variation at the individual level, then we cannot predict when organizational efforts to coordinate individual behaviors will succeed or fail.

To extend prior work on entrainment theory, we explore the process by which individuals think about and use time under the potentially competing influences of both organizational temporal structures and their own individualized views of time. To develop theory about this individual perspective, we build upon the concept of *temporal schemata*, cognitive frameworks for thinking about time. Like general schemata that represent information about frequently encountered concepts (e.g., Fiske & Taylor, 1991; Gioia & Poole, 1984; Robinson, 1986), temporal schemata provide a mental structure for interpreting units of time (e.g., hour, day, week, month, or year). They lead to heuristic assessments of situations as being at the "right" or "wrong" time (e.g., early vs. late, fast vs. slow; urgent vs. not urgent; Alba & Hasher, 1983; Labianca, Moon, & Watt, 2005; Larsen, Thompson, & Hansen, 1995). In contrast to studies in organizational behavior that portray temporal schemata as a shared understanding of time at a team or organizational level (e.g., Harris, 1994; Labianca et al., 2005), we instead elaborate the mechanisms by which they operate at the individual level, which explains how temporal schemata help individuals interpret time.

We propose that temporal schemata operate within a person-situation interaction, which we present using the cognitive-affective processing system (CAPS; Mischel & Shoda, 1995, 2010). By applying the CAPS to the domain of time, we show how this "situated person" approach (Mischel & Shoda, 2010) explains the process by which individuals interpret temporal cues within a situation, generating cognitive, affective, and behavioral responses that potentially reinforce or change organizational temporal structures (as well as modify one's own temporal schemata). We begin by briefly reviewing how organizational temporal structures can facilitate coordination and entrainment. We then define temporal schemata, describing how they are

formed and maintained. To exemplify how temporal schemata operate, we build upon the CAPS model (Mischel & Shoda, 1995) to examine the process by which individuals compare situational temporal cues to their temporal schema, while also accounting for characteristics of interpersonal situations such as outcome interdependence (Reis, 2008). Extending the CAPS model to this temporal domain allows us to further extend the entrainment literature by predicting when individuals will entrain to, resist, or create temporal structure. Overall, our paper moves entrainment from an implicit all-or-nothing perspective (i.e., individuals are entrained or not) to one that explicitly incorporates a variety of responses, including cognition and affect.

THEORY DEVELOPMENT

We begin by delimiting the aspects of time research most relevant for our goals. First, because there is no single theory of "time" (Bluedorn, 2002; Goodman, Lawrence, Ancona, and Tushman, 2001; Mitchell & James, 2001), we treat the concept as varying in degree between fixed objectivity and subjectivity that is individually perceived and/or socially constructed (e.g., Adam 1990; Bluedorn, 2002; Orlikowski & Yates, 2002). Second, rather than focus on one specific time frame (e.g., the hour), we describe temporal schemata across multiple time frames (e.g., hour, day, week, etc.) to establish the generalizability of our theorizing. Lastly, because we theorize from the perspective of the individual, theories of time at the societal or organizational levels (e.g., Adam, 1990; Barley, 1988; Butler, 1995; Van de Ven & Poole, 1995) are relevant only when establishing how temporal norms influence individuals, which we discuss next.

Temporal Structures for Coordination

By definition, organizations require coordination of individual and team efforts toward a common goal (e.g., Katz & Kahn, 1978; Okhuysen & Bechky, 2009). Such coordination underlies the overall flow of an organization's activities, including the scheduling of predictable tasks, allocation of time among different tasks, and their synchronization in relation to each other (McGrath & Kelly, 1986; McGrath & Rotchford, 1983). To address these issues, organizations and the groups within them use *temporal structures,* the organizing elements and norms that

define the temporal properties of organizational systems (Barley, 1988; Giddens, 1984; Hassard, 1991; Orlikowski & Yates, 2002). Common temporal structures that convey expectations about time include work schedules, regular meetings, routines, and deadlines. Deadlines, for example, provide a date in objective time by which work should be completed (Waller, Conte, Gibson, & Carpenter, 2001), creating a temporal structure that enables team members to adjust the pace of work towards the project's end (Okhuysen & Waller, 2002; Waller, Zellmer-Bruhn, & Giambatista, 2002)[1].

Prior research demonstrates that temporal structures create rhythms of organizational activity to which individuals entrain, which occurs when a pacer or zeitgeber (i.e., a "time giver" such as a recurring deadline) provides a rhythmic signal for when to exhibit a certain behavior (Ancona & Chong, 1996; Bluedorn, 2002; Hall, 1983; McGrath & Kelly, 1986). By signaling the necessary timing and pace of work, these zeitgebers help individuals to entrain to the organization's rhythm over time (Ancona & Chong, 1999; Bluedorn, 2002; Gevers, Rutte, & van Eerde, 2006; Waller et al., 2001). Entrainment can be unintentional, such as activity patterns that naturally emerge (e.g., a shift worker "becomes entrained by shifting eating and leisure activity to fit the particular shift"; Ancona & Chong, 1996: 258), or it can be intentional, such as the creation of temporal structures by leaders to purposefully organize individual and team efforts (e.g., "the manager as conductor must coordinate the timing, change, and attention from one rhythm to another"; Ancona & Waller, 2007: 144; see also McGrath, 1990).

Although theory on temporal structures and the possibility of entrainment is well-established at the organizational and team levels, little clarity exists about *individual* cognition,

[1] We use the concept of organizational temporal structures to generally describe efforts toward temporal coordination. However, we acknowledge that temporal structures can be used for other purposes beyond our scope (e.g., sensemaking or temporal accounting; Orlikowski & Yates, 2002).

affect, and behavior within these coordinating structures (cf. Blount & Janicik, 2002; McGrath et al., 1984). We contend that, although individuals may synchronize their efforts with others, at times they may resist synchronization when they judge the temporal structure as inconsistent with their personal preferences. This may occur when individuals entrain to certain aspects of coordinating structures but not others, such as entraining to the kick-off of a project but not a deadline (e.g., turning in one's portion late), or entraining to a deadline but not the pace (e.g., procrastination relative to others). Unfortunately, by focusing on higher levels of analysis, prior studies mostly address entrainment as a dichotomy (i.e., entrained or not) rather than a matter of degree and type. In fact, because some studies have noted unexplained variation *within* collectives (e.g., Ancona & Waller, 2007; Perlow, 1999), scholars have suggested that additional theory is needed to understand how individuals' attitudes and cognition influence their behavior within the context of temporal structures. Developing this view highlights a "micro" individual level approach to build upon more "macro" organizational temporal structures, which we show in the left side of Figure 1 and elaborate in the next section.

Insert Figure 1 here

A Model of Individual Temporal Schemata within Organizational Temporal Structures

To understand how individuals think, feel, and act in the context of coordinating structures requires delving into the mind of an individual relative to time, specifically, the individual level construct of temporal schemata. Temporal schemata are a specific type of schemata, which are the cognitive frameworks that help individuals interpret their experiences. Schemata generally represent and organize abstract information about frequently encountered concepts by shaping the encoding, memory, and evaluation of information (Bartlett, 1932; Fiske & Taylor, 1991; Gioia & Poole, 1984; Robinson, 1986; Taylor & Crocker, 1981). These mental frameworks exist for almost any form of knowledge or experience, including oneself, people,

and events (Fiske & Taylor, 1991). For example, the word "work" invokes thoughts about concepts such as tasks, coworkers, and pay. Schemata are typically unconscious (Gioia & Poole, 1984; Louis & Sutton, 1991), enabling people to experience a particular context without thought. By providing heuristics from past experience about what makes sense and what does not (Fiske & Taylor, 1991; Walsh, 1995), schemata offer a mental map to implicitly answer questions about situational cues such as, "What is it?" and "How should I respond?" (Harris, 1994).

Applied to the domain of time specifically, *temporal schemata* are cognitive frameworks that provide an understanding of time, including hours, days, weeks, months, seasons, and years (Larsen et al., 1995). Each time frame is a prototype on which to evaluate a given experience. For instance, after many years of an hourly work schedule (Zerubavel, 1981), most employees expect that meetings should begin on the hour or half-hour. When work deviates from this hourly temporal schema, individuals have difficulty pacing their work (Labianca et al., 2005). Yet why should it matter if a meeting starts at 10:00 a.m. versus 10:12 a.m.? This example suggests that, by conferring the expected timing and/or sequence of experiences (Larsen et al., 1995), temporal schemata help people to put structure around the abstract, fluid concept of time, allowing them to gain some sense of predictability, control, and order.

We contend that temporal schemata have three major characteristics: they are *relatively content-specific*, *formed early*, and *resistant to change*. First, compared to general schemata, temporal schemata are more content-specific (e.g., an hour has 60 minutes; a workday lasts 8 hours). Whereas a general schema for a "leader" could refer to a male or a female, a formal or informal leader, an immediate supervisor or a senior executive, temporal schemata in contrast contain more content about the time frames to which they refer, reflecting the ubiquitous temporal cues that surround people in everything they do (Adam, 1990; Avital, 2000; Bluedorn, 2002). For example, a temporal schema about the hour (e.g., typical start/stop times) derives from the invention of the hourly schedule (the Benedictine "horarium") for efficient use and coordination of time (Zerubavel, 1981). A temporal schema about the day (e.g., working during

the day, not the night) is shaped by circadian rhythms from the rising and setting of the sun (Bodenhausen, 1990; Watts, Cox, & Robson, 1983; Yam, Fehr, & Barnes, 2014). A temporal schema about the week (e.g., different interpretations of days of the week) derives from invention of the five-day workweek (Zerubavel, 1985) and the resulting weekly cycle of affect (e.g., Larsen & Kasimatis, 1990; Weiss & Cropanzano, 1996; Zerubavel, 1985). Lastly, a temporal schema about the year (e.g., a new year begins every 12 months) is influenced by the creation of the annual calendar to reflect the rotation of the earth around the sun as well as the sociological importance of the first month of the year (Zerubavel, 1981). These examples illustrate that pervasive physical and sociological cues lead individuals to form specific temporal schemata, resulting in a "temporal portfolio" that reflects beliefs about a variety of time frames.

A second characteristic of temporal schemata is that they form early in one's life. Three predominant influences—childhood, national culture, and work experience—create "primary" versus "secondary" socialization specific to time (Berger & Luckmann, 1966). Primary socialization first develops as young children observe adults enacting various rhythms, such as the hourly routine of a particular day or the weekly routine of work/school days (cf. Hassard, 1991; McGrath & Rotchford, 1983; Weigert, 1981; Zerubavel, 1981). These early experiences create a principal structure of rhythms across hours, days, weeks, and months, helping children to know what to expect on any given day. Additional primary socialization derives from national culture, which can influence norms for the pace of work and life (Hall, 1983; Levine, 1997), creating some similarity in temporal schemata within a society (e.g., the New Year is interpreted differently in the United States versus China). Yet even within a national culture, one's temporal schemata reflect unique experiences when different families enact different rhythms (e.g., parents that work the first shift versus the graveyard shift). Beyond this primary socialization, secondary socialization augments initial temporal schemata with ongoing experiences in life and work (cf. McGrath et al., 1984). One's first job substantially contributes to secondary socialization because it provides role-specific knowledge (Berger & Luckmann, 1966), such as

professional expectations for time (e.g., a busy season for accountants). Such "tacit understanding" (Berger & Luckmann, 1966) allows enactment of the temporal structure of one's profession, adding richer and more complex details to one's schemata (Fiske & Taylor, 1991).

Change resistance is the final characteristic of temporal schemata. Unlike social schemata, which are relatively stable but include idiosyncrasies about the people one encounters (Fiske & Taylor, 1991), temporal schemata are more consistent and frequently activated. To wit, the metric of an hour is the same day after day and it is encountered multiple times per day, repeatedly reinforcing one's current views. Additionally, whereas secondary socialization can augment primary socialization, it rarely supplants earlier views, except when the original beliefs are seen as flawed (Berger & Luckmann, 1966). For instance, if required to repeatedly work weekends to support a product launch, rather than change one's weekly temporal schema, an employee may instead see herself as a poor fit for the job. Thus, small deviations typically can be ignored (Fiske & Taylor, 1991; George & Jones, 2001), but larger deviations require greater effort to make sense of the mismatch. This process of comparing one's temporal schemata to situational cues explains how temporal schemata operate, that is, how individuals think about and respond to organizational efforts toward synchronization and entrainment.

How temporal schemata operate: The temporal cognitive-affective processing system. As the previous sections reveal, individuals sit at the intersection of (a) organizational temporal structures that assist with coordination, and (b) temporal schemata that facilitate an individualized understanding of time. This discussion positions both temporal structures and temporal schemata as abstract ideals across situations (e.g., a workday *should* end at 5:00 p.m.). However, these abstract ideals can be translated into more detailed realities by examining the use of temporal schemata within a given situation.

To explain how temporal schemata operate in a specific situation,[2] we build upon the cognitive-affective processing system (CAPS; Mischel & Shoda, 1995, 1998, 2010), a person-situation model that describes how individual behaviors manifest in a particular context. Although originally developed as a model of personality within situations, CAPS has been expanded as a "metatheory for studying the mind in context…applicable across diverse content domains (e.g., attitudes, cognitions, memory representations, including representations of the self)…" (Mischel & Shoda, 2010: 151). Generally speaking, the CAPS process begins when situational cues trigger the "situated person" to interpret the experience (Mischel & Shoda, 2010). These cues activate both cognitive ("cool") and affective ("hot") reactions, including encodings, expectancies and beliefs, goals and values, self-regulatory plans, and "affects" (i.e., emotional and physiological responses to the experience, such as dissatisfaction; Mischel & Shoda, 1995). These cognitive and affective units create relatively stable situational profiles that result in "*if…then*" scenarios (Mischel & Shoda, 2010), such that, if a certain situation exists, the individual responds in a particular way (Mischel & Shoda, 1995).

By integrating the concept of temporal schemata into this model, we propose a *temporal cognitive-affective processing model* (temporal CAPS), in which we extend CAPS with additional specificity regarding its two stages. First, the CAPS model blurs the line between the construal of situational cues and resulting characterizations of them, referring to both the medium and outcome of a situation as "encoding" (Zimmerman, Swider, Woo, & Allen, 2016). In contrast, our temporal CAPS model differentiates these elements to add clarity to the process by which processing occurs. Specifically, we refer to the "if" process of construal as the "consistency evaluation function" (a new concept detailed below) and the resulting characterizations of this processing as the specific "encodings." By doing so, we also

[2] Although increased complexity can be necessary to reflect reality (cf. Tsoukas, 2017), we first restrict the context to one situation to build a strong theoretical foundation at the individual level.

demonstrate how the content and strength of temporal schemata considered during consistency evaluation impact the order in which cognitive and affective processing occur, something the CAPS model leaves unspecified. Second, we likewise tease apart the "then" portion of CAPS to expand the model into a process of "*if…then…therefore.*" This modification allows us to describe how the cognitive and affective processing ("then") that follows from consistency evaluation in turn shapes specific behaviors such as entrainment (or lack thereof; "therefore"). Whereas the CAPS model focuses on cognitive and affective processing and simply asserts that behaviors follow, we develop the behavioral generation process further to make specific predictions about when individuals will or will not entrain.

We propose that the temporal CAPS process begins when an organizational temporal structure provides "situational temporal cues"—signals about time relevant to the specific situation. Five primary temporal cues characterize situations: beginning, ending, duration, pace, and position (Ancona, Okhuysen, & Perlow, 2001). The *beginning* is the point at which an experience starts or restarts based on an event or cycle (see also Gersick, 1994; McGrath & Rotchford, 1983; Morgeson, Mitchell, & Liu, 2015). An *ending* is the point when a situation finishes, whether terminating indefinitely or concluding until the next cycle begins. Beginnings and endings are the most important cues because they provide boundaries that define what is and is not part of an experience (e.g., Albert, 2013; Ancona et al., 2001; McGrath & Kelly, 1986; Roe, 2008; Zaheer, Albert, & Zaheer, 1999), thereby shaping the remaining cues. *Duration* is the time between the beginning and ending, such that a situation has a shorter or longer duration based on how close the ending is to the beginning. *Pace* is whether the experience unfolds at a steady versus irregular rate (e.g., speeding up then slowing down). Lastly, *position* indicates where the situation falls in the relevant time frame, such as an early start that coincides with the beginning of the time frame or a later start closer to the middle or end of the time frame.

One common event that exemplifies these temporal cues is a recurring meeting, such as regular cross-functional meetings about a new product launch. If a weekly meeting (i.e.,

temporal structure) is scheduled each Monday morning to coordinate efforts for the week, this situation begins when the meeting starts (e.g., Monday at 9:00 a.m.), and it ends when the meeting concludes (e.g., 10:00 a.m.). The duration is the time between beginning and ending (e.g., 1 hour), and the pace reflects whether the tempo of the meeting's activities is regular or irregular across its duration (e.g., productivity that is steady versus lagging until the latter half; e.g., Gersick, 1988). Lastly, position is the start of the meeting against the relevant time frame (e.g., Monday is an earlier start for the workweek than is Thursday).

In contrast to the general CAPS model assumption that situational cues lead directly to the creation of cognitive and affective units (e.g., encodings, expectancies, affects), we instead propose that temporal schemata provide a *heuristic* against which temporal cues are evaluated for consistency. To explain this consistency evaluation function ("*if*" in Figure 1), we draw from prior schema theory to explain how individuals interpret cues. First, schemata by definition provide an evaluative function (Taylor & Crocker, 1981), allowing individuals to notice and interpret cues, search for meaning against past experiences, and enact a response for moving forward (Fiske & Taylor, 1991; Harris, 1994; Maitlis & Christianson, 2014). For instance, if the weekly meeting is scheduled on an atypical day (e.g., a Thursday meeting has a late "position" during the week), it primes a search within one's temporal schemata portfolio for a relevant time frame against which to compare the situational cue, in this example, the weekly schema.

That said, schema theory states that comparison of cues to a schema only begins when a situation is novel, discrepant from one's expectations, and/or calls for deliberate attention, requiring some sensemaking (Fiske & Taylor, 1991; Louis & Sutton, 1991; Taylor & Crocker, 1981).[3] In contrast, when an experience reinforces an individual's activated schema,

[3] Note that we follow the cognitivist tradition of sensemaking, which emphasizes how "sensemaking develops in actors' minds" (Sandberg & Tsoukas, 2015, S9), as opposed to the constructivist tradition, which focuses on

sensemaking is minimal and behaviors are relatively automatic. Building on this principle, if the timing of the situational cues is *consistent* with one's temporal schema, we contend that the cognitive and affective units of the temporal CAPS model are irrelevant, and the individual should automatically entrain. For example, if a recurring Monday meeting corresponds with one's temporal schema, the individual should entrain without thought, following an expedited path to automatic entrainment in Figure 1. Further, barring additional events or changes, this entrainment should be sustained over time because, as the individual enacts timing consistent with other employees, she implicitly reinforces the temporal structure (McGrath & Kelly, 1986; Orlikowski and Yates, 2002; feedback loop "a" in Figure 1). This prediction corresponds with the existing entrainment literature (McGrath & Kelly, 1986), yet we extend it by specifying the theoretical mechanism by which automatic and sustained entrainment occurs: the consistency evaluation function derived from one's temporal schemata.

In contrast, a wholly different experience occurs when the situation's temporal cues and one's temporal schema are *inconsistent.* That is, when the beginning, ending, duration, pace, and/or position presented by the context do not match one's expected timing, the situation naturally draws one's attention, leading to more mindful thought (Blount & Janicik, 2001; Fiske & Taylor, 1991; George & Jones, 2001; Louis & Sutton, 1991). Given the heuristic function of the schema, inconsistency leads to construing the temporal cue(s) as ill-timed. Thus, the individual will enter into the temporal CAPS process, using the temporal schema as the cognitive frame against which the cognitive and affective elements of the model are developed. Individuals will then generate temporal encodings (e.g., characterizing the experience as early/late; fast/slow; urgent/not urgent), expectancies (e.g., beliefs that one's time will impact work outcomes), goals and values (e.g., efficient time use as a priority), self-regulatory plans (e.g., scripts to use time in

---

"actionable intersubjectivity constructed through [the use of] language" (Sandberg & Tsoukas, 2015, S9). The cognitivist view centers on how an individual thinks about and makes sense of cues.

a certain way), and affect (e.g., dissatisfaction about misuse of time; cf. Mischel & Shoda, 1995; Shoda & Mischel, 2006). These cognitive and affective units are interrelated, which we denote by the arrows that connect them in Figure 1. Like the original CAPS model, curved arrows among the units do not imply exact relationships but rather possible relations among one's cognitive and affective reactions when specific situations trigger stronger activation and/or sequencing of certain units (Mischel & Shoda, 1995).

Going beyond the CAPS, however, we contend that the strength of the temporal schema dictates how such processing begins—specifically, whether it begins with a cognitive or affective frame (the thick arrows in the "*then*" portion of Figure 1). Because temporal schemata are foundational to one's understanding of time, the more strongly individuals hold a temporal schema (e.g., "Weekly meetings *must* be held on Monday to coordinate our work), the more likely they will start processing with affect when inconsistency occurs (e.g., "I'm frustrated that our team isn't meeting until Thursday – that's too late!"). In this "hot" processing, a stronger temporal schema leads the individual to process through an affective lens that colors the resulting cognitive units (i.e., construing the encodings, expectancies, goals, and plans based upon the initial affective reaction). In contrast, when the temporal schema is more weakly held and therefore less important, processing should begin with a cognitive frame (e.g., "This meeting may be at the wrong time—I wonder why this situation exists?"). We propose that such "cool" processing leads the individual to prioritize encoding to construe the discrepancy, which then shapes the resulting units of the model (i.e., construing affect, expectancies, goals, and plans based upon the initial cognitive encoding).

Because of cognitive and affective reactions that derive from the consistency evaluation function, the individual must then decide how to respond, reflecting the behavior generation process ("*therefore*") in Figure 1. The original CAPS model does not describe specifically how behaviors are generated, but we combine the aforementioned logic with an extension of CAPS based on characteristics of interpersonal situations (Reis, 2008): (1) outcome interdependence—

the extent to which one's outcomes rely upon others; (2) mutuality of power—the extent to which the interdependence reflects a power imbalance; (3) anticipation of future interdependence—expectations of ongoing interactions; and (4) information uncertainty—the availability of information relevant to one's behavioral choices.[4] These four characteristics operate in an additive, profile-like fashion to influence how individuals respond in a given situation (Reis, 2008). In addition, to identify specific behavioral responses to inconsistency (i.e., types of entrainment), we combine these situational characteristics with research on how individuals respond to undesirable circumstances (e.g., Farrell, 1983; Hirschman, 1970; Rusbult, Farrell, Rogers, & Mainous, 1988). Accordingly, our model suggests the following behavioral outcomes: deliberate entrainment (a form of loyalty), passive or active resistance (a form of voice or neglect, depending upon enactment), or the creation of additional substructure (a form of voice). As we elaborate when a particular behavior will emerge, we also propose when these behaviors may be sustained or temporary (at times leading to exit).

Deliberate entrainment. First, we propose that individuals may indeed entrain to the organization's suggested timing but do so by consciously rationalizing inconsistencies. In this case, situational temporal cues are inconsistent with one's temporal schema, but the individual feels pressure to entrain due to the influence of the situational characteristics shown in Table 1.

Insert Table 1 here

First, pressure to entrain can result from high levels of outcome interdependence within one's work unit. When outcome interdependence is high, individuals work closely together and

[4] Two additional characteristics exist: outcome correspondence (cooperation versus competition) and basis of interdependence (exchange versus synchronization). However, temporal structures by definition reflect coordination and synchronization, and therefore both are constant in our model.

must coordinate with others to accomplish mutually dependent goals (Johns, 2018; Reis, 2008). Taking our example of a weekly product launch meeting, consider administrative assistants whose performance is tied completely to the leaders whom they support. Highly interdependent individuals like these will perceive pressure to entrain, even if the situation does not fit their own view of time. This type of conformity is a form of loyalty (Rusbult et al., 1988), in which individuals rationalize and accommodate cues that diverge from their preferences to support the collective (George & Jones, 2001). Deliberate entrainment also occurs when mutuality of power is low because individuals with less power (e.g., administrative assistants, entry level employees, or newcomers) have comparatively little control over resources, decisions, or rewards (Pfeffer, 1981; Reis, 2008), and may be afraid to voice their opinions that the timing of a situation is incorrect (Burris, Detert, & Chiaburu, 2008; Morrison, 2014). As a result, they are less likely to deviate from the organization's or team's rhythm (cf. Blount & Janicik, 2002; Hall, 1983), instead entraining intentionally. Likewise, when information uncertainty is low, there are clear and consistent cues about timing (Kelley et al., 2003). These "strong" situations constrain behavior and penalize nonconformance (Meyer, Dalal, & Hermida, 2010; Mischel, 1977). Thus, loyalty is exhibited by following the potent situational cues that entrainment is required. Finally, when future interaction is high (e.g., ongoing involvement in the product launch team), individuals anticipate that additional interactions with colleagues will build upon the present experience (Reis, 2008). As such, pressures to entrain despite one's preferences may be undergirded by expectations of ongoing reciprocity within the collective. Loyalty may thus seem compulsory when longer-term relationships are anticipated (Rusbult et al., 1988), leading individuals to entrain more deliberately today in the hopes of future reciprocation.

Together, our logic suggests that individuals should be more likely to entrain deliberately when the situation's temporal cues mismatch one's temporal schema, but the experience is characterized by high outcome interdependence, low power, low uncertainty, and high future interaction. Under these conditions, individuals justify discrepancies as worth enduring for the

good of the organization, or as frustrating but nonetheless required to protect one's self-interests. In both cases, individuals resign themselves to the suggested timing of the situation by downplaying their preferred timing (i.e., their own temporal schema), acting out of loyalty to the collective. Thus, entrainment occurs not automatically but volitionally as the individual consciously synchronizes their rhythm with that of others, even if entrainment is not preferred.

Proposition 1a: Individuals will deliberately entrain to organizational temporal structures when their temporal schemata are inconsistent with temporal cues of the situation and when i) outcome interdependence is high, ii) mutuality of power is low, iii) information uncertainty is low, and iv) likelihood of future interactions is high.

As with automatic entrainment, a primary organizational outcome of deliberate entrainment should be increased coordination because even conscious entrainment further reinforces the temporal structure (feedback loop "b" in Figure 1). Yet, based on the relative primacy of the cognitive versus affective units in the temporal CAPS model (i.e., affect-first versus cognition-first construals), we see two possibilities for whether such entrainment is sustained. First, when deliberate entrainment results from a cognition-first construal, individuals will rationally accept the situation despite its inconsistency with their own temporal schema. Although the temporal structure is not preferred, a more weakly held schema allows cognition to predominate such that any affect is processed through a cooler cognitive frame. Cognitively accommodating the inconsistency also may include accommodation within the temporal schema of a situational exception (the dashed line of feedback loop "c" in Figure 1). Further, as repeated exceptions accumulate, the individual may ultimately modify the overall temporal schema (i.e., the increasingly shaded arrows accumulating from feedback loop c), particularly if sensemaking with colleagues convinces one that the situation is unlikely to change. In this case, the inconsistent circumstance is no longer a situational exception, but instead becomes an accepted part of the temporal schemata portfolio. For these reasons, we predict that deliberate entrainment that is more cognitive should be sustained over time.

Alternatively, when inconsistency is processed through an affect-first construal based on a strongly held schema, deliberate entrainment should be temporary. This form of entrainment occurs when the individual recognizes that he must entrain, but experiences negative affect because he does not accept the situation as legitimate. For example, an administrative assistant may be frustrated by a weekly Thursday meeting because it adds pressure to finish tasks before the end of the workweek. Under these circumstances, intentional synchronization of one's rhythm creates a dissatisfying sense of misfit (Follmer, Talbot, Kristof-Brown, Billsberry, & Astrove, 2018), which may be tolerated temporarily if the discrepancy is small (Edwards, 2008). However, acceptance of misfit is unlikely to be open-ended, particularly if sensemaking with others reinforces one's resentful feelings that the timing is wrong. Although individuals can accommodate inconsistencies within any single situation (Fiske & Taylor, 1991; Harris, 1994; Maitlis & Christianson, 2014), each additional exposure is a reminder that the discrepancy remains without permanent resolution. Failing to make sense of the situation over time, this accumulating discontent should lead to consideration of an eventual exit (Burris et al., 2008; Jansen & Shipp, 2019; Zimmerman et al., 2016). The implication of affect-laden deliberate entrainment is that, although the collective achieves coordination in the short-term, because of individual dissatisfaction, the long-term effects could be negative. Thus, some types of deliberate entrainment can be detrimental to both individual and organization across time.

Proposition 1b: When the situation persists, deliberate entrainment that is more cognitive than affective will be sustained rather than temporary, leading individuals to eventually adapt their individual temporal schemata.

Proposition 1c: When the situation persists, deliberate entrainment that is more affective than cognitive will be temporary rather than sustained, leading individuals to eventually exit the organization.

Passive or active resistance. A second possibility when a situation is inconsistent with one's temporal schema is that the individual resists the temporal cues offered by the situation,

either passively (i.e., small, implicit acts of resistance) or actively (i.e., more substantial, explicit resistance). We turn first to passive resistance, which is withholding of effort (e.g., Carpenter & Berry, 2017; Spector et al, 2006) and is a form of neglect (Farrell, 1983; Rusbult et al., 1988). Unlike deliberate entrainment, passive resistance is not tolerance of inconsistency; instead, individuals are aware of it and choose not to entrain in some small way. They do so, however, with no intention of benefitting the organization. Rather, the primary goal is to sufficiently preserve their own rhythm of work in the face of inconsistencies.

As shown in Table 1, we propose that passive resistance is more likely when outcome interdependence is low to moderate. With relatively lower interdependence, individuals' outcomes are less reliant on others, increasing the likelihood of individualistic thinking (Reis, 2008). As a result, they feel less pressure to entrain against their wishes, enabling them to resist one or more of the situation's temporal cues (e.g., working at one's own pace rather than that of others; Blount & Janicik, 2002). For example, a finance manager assessed with individual performance targets for the product launch may occasionally leave the weekly meeting early to take an important call (e.g., encoding the meeting as "less urgent"). Regardless of whether his reaction is more cognitive or affective, because his outcomes rely less upon others, he will occasionally resist leadership's coordination efforts by resisting in small but excusable ways.

Similarly, passive resistance is more likely when power is low to moderate. Lower power relative to others implies that individuals exert less control over their surroundings (Pfeffer, 1981). Thus, they can only resist in an understated manner, such as a finance manager beginning financial projections on time but finishing them a few days late due to "factors outside my control." Such resistance may be fueled by dissatisfaction at the situation or simply a cognitive detachment to instead work at one's own pace. Passive resistance also is expected in ambiguous situations with high information uncertainty (Kelley et al., 2003; Meyer et al., 2010; Mischel, 1977), such as whether the projections are even needed at each weekly meeting. Because the temporal structure does not strongly specify a beginning, ending, duration, pace, and/or position,

individuals are able to interpret the situation in ways that allow partial entrainment according to their own rhythms. Thus, they will resist whatever vague structure exists to subtly work to their own temporal preferences. Lastly, passive resistance will be more common when future interactions with colleagues are less likely (e.g., temporarily being assigned to the product launch team). When further interaction is not anticipated, employees worry less about the consequences of future reciprocation (Rusbult et al., 1988). Consequently, they feel less pressure to entrain, instead acting in self-interest by neglecting temporal structure to work at their own pace.

In sum, we propose that individuals will passively resist entrainment when their temporal schema is inconsistent with the situational temporal cues, but the situation is characterized by lower outcome interdependence, lower power, higher information uncertainty, and lower likelihood of future interactions. Under these conditions, individuals will be more likely to quietly resist and neglect the overall temporal structure, entraining to some temporal cues but not others while they uphold their preferred rhythms.

Proposition 2a: Individuals will passively resist entrainment to organizational temporal structures when their temporal schemata are inconsistent with the temporal cues of the situation and when i) outcome interdependence is low to moderate, ii) mutuality of power is low to moderate, iii) information uncertainty is high, and iv) likelihood of future interactions is low.

As shown in Figure 1 (feedback loop "d"), the partial entrainment of passive resistance both reinforces the elements of temporal structure to which the individual is entrained and covertly (or inadvertently) undermines those elements that the individual resists (cf. Rusbult et al., 1988). Thus, passive resistance creates challenges for organization-level synchronization that might be difficult to diagnose because they are relatively less visible.

However, unlike the loyalty that can lead a deliberately entrained person to eventually adapt to the situation, passive resistance arises from a mindset of neglect in both cognitive-first and affect-first processing. If such situations recur and no sensible explanation is constructed

(whether in one's own mind or through conversations with others), the experience should become increasingly dissatisfying as the instances recur and affective processing begins to outweigh cognitive processing. This accumulating aspect of misfit is unlikely to be tolerated (Zimmerman et al., 2016) as individuals eventually reach a threshold for action (Jansen & Shipp, 2019). In this way, passive resistance has negative short-run implications for performance and morale, as individuals feel the tension of partially entraining and partially resisting. Further, negative long-run implications also exist, as eventual exit from the organization is likely after sustained neglect reaches a tipping point (Burris et al., 2008).

Proposition 2b: When the situation persists, passive resistance will be temporary rather than sustained, leading individuals to eventually exit the organization.

In contrast, active resistance occurs when individuals notice the inconsistency between the situation's temporal cues and their temporal schema, but choose not to entrain through explicit verbal or physical actions. Compared to passive resistance where only small changes are made to one's own rhythm (i.e., partial resistance), active resistance includes larger efforts to change the organization's temporal structure to match one's personal sense of timing (i.e., full resistance). This resistance can occur in a constructive or destructive manner (Warren, 2003).

Active resistance is constructive for the organization when the individual resists the specific situation but voices suggestions about the broader temporal structure it represents (Rusbult et al., 1988). Such voice is often motivated by a strong emotional reaction to the situation (Morrison, 2014), meaning that active resistance should occur when the temporal schema is more strongly held and, thus, affect-first processing shapes the individual response. Further, as presented in Table 1, we predict that constructive resistance will be more likely when outcome interdependence is moderate. To the extent that some degree of outcome interdependence exists, a person is more invested in finding solutions that are collectively beneficial, rather than only personally so (Reis, 2008). Yet because interdependence is not too high, the person has the ability to deviate from the situation's timing without negatively

influencing the collective. In addition, when mutuality of power is high and therefore tipped in favor of the employee (e.g., through hierarchical level or "star" status; Call, Nyberg, & Thatcher, 2015), the individual feels less pressure to adopt collective norms (Pfeffer, 1981). This power may derive from unique skills and expertise, a strong relationship with a manager, or long tenure in the organization. However, powerful individuals can use their power to improve the group's coordination efforts. Continuing our product launch example, a vice-president of production may refuse to attend Thursday team meetings (i.e., full resistance to meetings that are "too late") but instead recommend that future meetings occur on Monday or Tuesday as a more reasonable day of the week (i.e., an earlier position).

Constructive resistance likewise is expected when uncertainty exists in the situation. In the absence of clear temporal cues from the context, such as whether the team truly needs an update earlier in the week, individuals will be inclined to fully resist the ambiguous cues. Instead, they will promote their preferred timing, which they believe better addresses overall goals (Mischel, 1977). Similarly, individuals who anticipate higher levels of future interactions with colleagues take actions that are mutually beneficial to all parties (Reis, 2008). They should encourage constructive suggestions for redesigning the temporal structure so that they (and others) can better entrain to the work cycle as joint efforts continue, advancing their preferred sense of timing instead of the cues provided in the situation.

Conversely, active resistance can be destructive to the organization if the individual refuses to entrain to the organization's timing without concurrent efforts at improvement. In this case, as individuals interpret discrepancies between the temporal cues of the situation and their temporal schema, they enact an alternative rhythm that undermines the existing temporal structure. Destructive resistance could be unintentional (e.g., individuals ignore the temporal cues based on cognition-first processing) or intentional (e.g., individuals retaliate by working in a different rhythm based on affect-first processing; Blount & Janicik, 2002). Either way, such destructive behavior can be considered a form of neglect whereby individuals harm the

organization (Farrell, 1983) when they fully resist the situation's temporal cues.

As Table 1 reveals, we propose that destructive resistance is likely when individuals have more power and when information uncertainty is higher. Because powerful individuals feel that norms do not apply to them (Pfeffer, 1981), they should pursue their own schedule to the exclusion of others, even if it negatively impacts overall coordination efforts. For example, prestigious product designers often pursue a slower pace of new product ideas in defense of creative license (Criscuolo, Salter, & Ter Wal, 2014; Mainemelis, 2010). Despite knowing that resistance puts the product launch schedule at risk, these designers hold tremendous power because they perform the valuable task of designing innovative products. In addition, destructive resistance is more likely when information uncertainty is higher. When circumstances are ambiguous, such as doubt about whether components of the product designs must be finalized for the weekly cross-functional meeting, individuals may enact risky behaviors to address these ambiguities (Reis, 2008). To protect their self-interests in a weak situation, individuals should pursue their own sense of timing, fully resisting the schedule proposed by the organization by defending their opinion for when work should be conducted.

The two aforementioned characteristics are similar for destructive and constructive resistance, but these behaviors differ in levels of outcome interdependence and anticipated future interaction. When outcome interdependence is low (e.g., product designers work independently of other functions), they are unlikely to take others' views into account and therefore less likely to be persuaded by or to persuade others (Reis, 2008). As a result, they should independently enact rhythms to suit their own temporal beliefs, even if the collective's desire for synchronization is thwarted. In addition, when anticipated future interactions are low, individuals will hold a less prosocial mindset as they attempt to maximize their own short-term goals (Reis, 2008). Therefore, they should forego any adaptation of their own temporal schema as they ignore pressures for conformity to pursue their own rhythm. Regardless of whether the motives for resistance are inadvertently or intentionally destructive, such opposition should produce full

resistance, leading to a complete lack of entrainment to the existing temporal structure.

Proposition 3a: Individuals will actively and constructively resist entrainment to organizational temporal structures when their temporal schemata are inconsistent with the temporal cues of the situation and when i) outcome interdependence is moderate, ii) mutuality of power is high, iii) information uncertainty is high, and iv) likelihood of future interactions is high.

Proposition 3b: Individuals will actively and destructively resist entrainment to organizational temporal structures when their temporal schemata are inconsistent with the temporal cues of the situation and when i) outcome interdependence is low, ii) mutuality of power is high, iii) information uncertainty is high, and iv) likelihood of future interactions is low.

As shown in Figure 1 (feedback loops "e" and "f"), active resistance can either positively or negatively modify the temporal structure being resisted. Whereas constructive resistance aims to change structure for the better with voice, destructive resistance destabilizes the existing structure with neglect. Yet in both cases, resistance is full and entrainment is non-existent. As such, constructive resistance could provide long-term opportunities for coordination if voiced suggestions benefit the organization, but these prospects would be accompanied by short-term challenges due to an interim lack of synchronization. On the other hand, destructive resistance creates both short- and long-term challenges. Initially, the destructive resistor thwarts coordination, whether based on an affective or cognitive reaction to the situation. If this lack of coordination accrues over the long-term, organizational leaders must decide whether to tolerate the dissent or instead adopt the individual's rhythm. Because destructive resistance is a form of neglect rather than voice, unless the resisting employee is particularly valuable, it is unlikely that the organization will change its temporal structure in response to one dissenting individual.

Accordingly, an organization's response to constructive or destructive resistance dictates whether the resistance is sustained or temporary. If the leaders adopt the changes vocalized via

active and constructive resistance, the affect-laden discrepancies between the situation and one's temporal schema should be resolved and the individual should conform to the new structure. That is, active and constructive resistance leads to eventual entrainment when one's voice is heard and enacted. However, if inconsistencies are never resolved and the situation persists, the constructive resistor will accumulate further dissatisfaction at the unsuccessful use of voice and, after additional affective processing, eventually consider exiting the organization. The destructive resistor is also at risk of exit, but for different reasons. Those exhibiting destructive resistance simply work to their own rhythm without suggesting changes, making it doubtful that changes will be made in the organization's temporal structure. This circumstance sustains a degree of misfit that neither individuals nor organizations will tolerate indefinitely. Thus, this behavior should lead to an eventual voluntary or involuntary exit (Zimmerman et al., 2016).

Proposition 3c: When the situation persists, active and constructive resistance will be temporary rather than sustained, eventually leading to (i) entrainment if the inconsistencies are resolved, or (ii) exit if they are not.

Proposition 3d: When the situation persists, active and destructive resistance will be temporary rather than sustained, eventually leading to exit when inconsistencies are unresolved.

Creation of additional substructure. A final behavioral option occurs when inconsistency exists between the situation's temporal cues and one's temporal schema, but there are *too few* cues (e.g., an unspecified pace or ending). In contrast to situations where cues are construed as "wrong," inconsistency here derives from cues that are "inadequate" relative to one's expectations. For example, endings may be implied rather than precise (Albert, 2013), or they may be explicit but too distant to meaningfully shape present behavior ("not urgent"; Steel & König, 2006). In both cases, one's temporal schema leads to the expectation of additional temporal information that is simply unavailable. The result is cognition-first encoding of one's temporal goals, expectancies, and plans, leading to the creation of "substructure" to augment the

broader temporal structure. This substructure becomes a form of punctuation (Albert, 2013) to keep the situation on track (e.g., "more urgent"; Yakura, 2002) in light of missing cues.

The creation of substructure relates to the four situational characteristics in a different pattern than the other behavioral outcomes (see Table 1). First, when information uncertainty is high (e.g., an unclear pace or ending), individuals must search for ways to understand the situation. For instance, a marketing manager associated with the new product launch may know that promotional actions should entrain to the product launch date, but she may be uncertain how urgent her efforts should be prior to that end date. As a result, she could choose to pace her work by the week, using each Monday as a temporal landmark to signal a beginning (e.g., "I haven't made enough progress on the social media plan, but I'll start again next Monday"; Dai et al., 2014). This temporal substructure helps people interpret the situation and entrain to any available cues based on their own temporal encodings (i.e., "Am I on track/ahead/behind?").

Second, efforts to create substructure will be greater when anticipated future interactions are high. Knowing that one will continue to interact with others should influence employees to voice temporal innovations in the hope of building trust and reciprocity (Reis, 2008). For example, compared to an employee who plans to rotate to a different assignment, a marketing manager assigned to the same product launch team each year will be more invested in staying in sync with the team, potentially suggesting new temporal structures (e.g., weekly reports) when clear cues are absent.

However, beyond information uncertainty and future interactions, the creation of substructure can occur at any level of outcome interdependence or mutuality of power, albeit for different motivations and with different outcomes. For example, when outcome interdependence is high, individuals may propose additional temporal cues to the collective to facilitate entrainment. Yet even when interdependence is low, people can be motivated to create additional temporal cues for their own use, such as those who prefer to pace their work well before a deadline (Gevers, Mohammed, & Baytalskaya, 2015). Similarly, creation of substructure can

occur at any level of mutuality of power. When power is high, a person may influence others to adopt additional temporal cues and plans (e.g., a manager who creates a "faster" pace of work). Yet even with little power, individuals can create their own temporal cues (e.g., an individual who creates a steadier pace of work to reduce stress).

Overall, we posit that substructure is likely to be created when information uncertainty and future interactions are high, regardless of the levels of outcome interdependence or mutuality of power. That said, we note that high information uncertainty or anticipated future interactions also were predicted to lead to active and constructive resistance. The difference is that, although constructive resistance is motivated by inconsistent situational temporal cues that are perceived as mistimed (i.e., "wrong"), the creation of substructure is motivated by temporal cues that are inconsistent only in terms of their detail (i.e., "inadequate"). As a result, whereas constructive resistance leads to a complete lack of entrainment, creation of substructure leads to full entrainment to whatever cues exist, augmented by one's additional temporal cues.

Proposition 4a: Individuals will create more substructure when their temporal schemata are inconsistent with the temporal cues of the situation based on inadequate cues, and when i) information uncertainty is high and ii) likelihood of future interactions are high.

As shown in Figure 1 (feedback loop "g"), the creation of substructure reinforces organizational temporal structure because the individual fully entrains to any available temporal cues. In addition, enacting a substructure that facilitates one's entrainment potentially improves the existing temporal structure by offering innovations others have yet to identify. The implication is that the creation of substructure can positively impact organization-level coordination over the long-term.

Yet the proximal implications of such augmentation could be mixed. Whereas additional structure can help employees accomplish their individual tasks, if multiple employees create substructures without coordinating, conflict and misalignment are possible. Thus, it is critical that substructure also entrains (at least loosely) to the substructure of other individuals with

whom one is interdependent. Such entrainment could occur through collective sensemaking about innovations in substructure, which might create an even better fitting work situation as employees share additional cognition-first processing about the situation. Thus, to the extent that an individual identifies additional temporal cues that others agree to adopt, the existing temporal structure will be enhanced, leading to sustained entrainment.

Proposition 4b: When the creation of substructure is compatible with the larger temporal structure, entrainment is more likely to be sustained rather than temporary, particularly if inconsistencies are resolved through the enactment of additional substructure at the organizational level.

DISCUSSION

The pace of today's competitive environment requires organizational coordination of employees more than ever. As such, when synchronization and entrainment are lacking, the extant literature recommends strengthening organizational temporal structures (e.g., firmer deadlines, Yakura, 2002). However, our model suggests that doing so can be counterproductive if the individual perspective is disregarded. As an extension to McGrath and Rotchford, who stated that "failures to solve temporal problems at the organization level can result in increased temporal problems for the individual" (1983: 75), we suggest the opposite is also true. Failures to solve individuals' temporal problems can result in increased problems for the organization.

We argue that individuals assess whether a situation is at the "right" or "wrong" time based on their temporal schemata and the consistency evaluation function of our temporal CAPS model. Understanding how individuals cognitively and affectively make sense of temporal cues helps predict when coordination efforts will be supported or subverted, and whether entrainment will be sustained versus temporary. Thus, our paper answers long-standing calls for research at the individual level to explain when entrainment does or does not occur (Ancona & Chong, 1996; Blount & Janicik, 2002; Perlow, 1999).

Theoretical Implications and Future Research

By extending the entrainment literature with an individual-level perspective, our paper offers several implications and directions for future research.

Entrainment is not all-or-nothing—it varies by degree and type. By going beyond prior work to examine the individual-level determinants of entrainment, our theorizing suggests the idea of full entrainment may be unrealistic given the numerous ways in which temporal cues (i.e., beginning, ending, duration, pace, and position) can conflict with individuals' temporal schemata. Instead, entrainment occurs as a matter of degree (full to partial) and type (entrainment, resistance, creation). Some individuals will fully entrain but only if situational temporal cues are consistent with their schemata. In contrast, others could partially entrain (e.g.,

to a beginning but not an ending), creating weaknesses in coordination that are hard to detect. Still others will not entrain at all, whether destructively resisting to undermine temporal structure or constructively suggesting improvements.

This insight about degrees and varieties of entrainment allows a different lens through which to view prior research. For example, Bluedorn stated that entrainment is "an almost universal rule of thumb about whether things are all right or whether there is reason to worry" (2002: 173). Such points are echoed by Ancona and Chong (1996), Ancona and Waller (2007), and Okhuysen and Bechky (2009), who portray the predictability and synchronization of entrainment as generally positive. To be sure, *widespread* lack of entrainment could signal that organizational initiatives are ill-timed. However, because of individualized temporal schemata, it could be that, in many situations, temporal cues simply cannot resonate with everyone.

The behavioral alternatives of our model therefore suggest that consideration of individual reactions provides a more complex view of entrainment. In our view, individual temporal schemata must be examined in combination with the groups and organizations in which they are situated. As such, our model reframes entrainment not only as a function of top-down cycles and pacers that "pull" individuals into synchrony (Ancona & Chong, 1996; McGrath & Rotchford, 1983) but also a function of individual temporal schemata that potentially "push back." Varying degrees of entrainment versus resistance occur, with some benefitting the organization and others harming it. In addition, by identifying beneficial reactions such as constructive resistance and the creation of additional structure, we offer previously overlooked avenues for strengthening coordination that prior research has not identified. Therefore, our theorizing enables entrainment scholars to better address coordination problems and opportunities by tracing them to their source: the individual.

Entrainment is not simply behavioral—it is also cognitive and affective. Because the extant entrainment literature focuses on the collective, it downplays individual cognition and affect (exceptions are Perlow, 1999; Waller et al., 2001). Our temporal CAPS model suggests

that individuals may have strong sentiments about inconsistencies with their temporal schemata, such as potential dissatisfaction with deliberate entrainment or frustration that fuels passive or active resistance (e.g., perceived "temporal injustice" in an ill-timed situation). In some instances, this frustration will be channeled into constructive resistance. Yet, unless the individual has the power to enact higher-level change, which is unlikely for many, they may instead fall silent and ultimately leave, potentially harming the organization.

The key implication is that *temporal behaviors* involved in entrainment are different from *temporal mindsets*. Deliberate entrainment may portray the intended behavior but the mindset behind such an approach critically incorporates cognition and affect that may belie one's actions. As such, our theorizing suggests a strong connection between research on entrainment and temporal structures and research on affective and cognitive processes. We began with the CAPS model but also drew upon recent extensions of the model related to fit and turnover (e.g., Zimmerman et al., 2016). Whereas research on temporal structures generally contends that groups collectively enact new structures over time (Orlikowski & Yates, 2002), our logic elucidates how this process may begin when individuals behave according to their thoughts and feelings about misfit. To the extent that misfit with one's temporal schemata is not resolved, turnover is to be expected. This conclusion could explain why so many team members in Ancona and Waller's (2007) case study quit over the course of two years. Whereas Ancona and Waller (2007) explained this as lack of entrainment at the team and organizational level, our model explains how individuals responded to the idea of entrainment and instead chose to quit, suggesting that the organization missed opportunities to manage misfit at the individual level.

In fact, we contend that misfit actually could be the origin of temporal innovation, answering calls in the temporal structures literature for research on how and why zeitgebers emerge (Granqvist & Gustafsson, 2016). New temporal structures are necessary in times of strategic change, however, organization-level change is challenging (i.e., the organization itself is entrained to cycles and rhythms of customers, competitors, and administration). Thus, it is

important to identify where transformation begins. Our model proposes that, in addition to focusing on macro processes of change, there is value in attending to the micro-processes of individuals (cf. McGrath et al., 1984). New rhythms and zeitgebers likely originate in the mind of an individual who has unique (read: inconsistent) temporal schemata. That is, an individual first plants the seed of change that can lead to the establishment of a new temporal norm.

Yet discrepancy at the individual level may be stamped out or overlooked due to pressures for coordination. For example, when the leader of Team Delta in Ancona and Waller's study (2007) preferred a different production schedule to protect product quality, he was replaced with a new leader who would instead entrain to top management's schedule. We suggest that, in contrast to pursuing entrainment at the expense of temporal innovations, creating improvements to coordinating structures requires individuals who bring different points of view. Therefore, organizational leaders might intentionally cultivate or hire for inconsistency. As such, research on organizational temporal structures may redirect the search for temporal innovations to the individuals within an organization, specifically looking for outliers and misfits. By exploring those individuals' temporal cognition, affect, and behaviors, such a multilevel model may provide a better lens through which to uncover the genesis of zeitgebers.

Entrainment may not be sustained—multiple feedback loops exist. A final implication of our model is that even when individuals entrain (whether fully or partially), it may not be sustained as easily as is portrayed in earlier work. McGrath and Kelly (1986) stated that entrainment should persist even when temporal conditions change. However, as shown in Table 1, this prediction should be true only for automatic entrainment. Other entraining behaviors we identified are not maintained in the long-term—deliberate and affective entrainment is temporary, as is the partial entrainment created by passive resistance. Thus, we address a limitation of prior research by introducing multiple feedback loops that account for when the various behaviors (entrainment, resistance, and creation) will be sustained, either strengthening or weakening the organizational structure in which individuals are embedded.

Such a view suggests a reinterpretation of past findings such as Perlow's (1999) classic study of "time famine." After implementing a new temporal structure to specify certain hours of quiet-time (i.e., a zeitgeber to create a new rhythm of work time during the day), software engineers found their productivity increased substantially. However, the change in work rhythm was not sustained, and Perlow concluded that the vicious norm of urgency had returned. Our model suggests that, in contrast, the engineers may have differed in their individual responses to the quiet-time hours. Some may have felt that the quiet hours began or ended at the wrong time or the duration was not ideal (i.e., an inconsistent beginning, ending, or duration). Accordingly, they may have deliberately but resentfully entrained during the study because such a structure was imposed upon them, making entrainment unsustainable. As a result, a valuable organizational change may have been thwarted because the temporal cues of quiet-time were inconsistent with some employees' temporal schemata. Future field experiments such as Perlow's may start from the individual perspective to determine how to apply a new rhythm of work based on the variety of individuals' temporal schemata.

We also recommend that additional entrainment research at the individual level consider whether entrainment will be sustained based on the interplay of multiple situations or time frames. Although we built our model on one situation with a single set of temporal cues, multiple time frames (e.g., schemata for a day and a week) or situations (e.g., competing deadlines) could coincide. Just as teams engage in a "dance of entrainment" to multiple organizational rhythms (Ancona & Waller, 2007), so too must individuals dance within multiple rhythms. Our model implies that individuals could create additional substructure to accommodate these potentially competing rhythms or, based on the consistency evaluation function, they may simply prioritize situations that are most consistent with their view of time. That is, individuals may reconcile opposing situations by entraining to the one that best fits their temporal schemata and resisting those that do not. We posit that individuals could entrain more to cycles that recur within smaller time frames because it is easier to persistently entrain to higher frequency rhythms (e.g., daily or

weekly routines) than lower frequency rhythms (e.g., annual reporting periods; cf. Schmidt, Dolis, & Tolli, 2009). Future research can build upon our work to determine whether and how long individuals entrain when competing or complementary temporal cues exist across situations.

Managerial Implications

Beyond these theoretical implications, our work entails several insights for managers dealing with coordination challenges. First, if managers fail to note inconsistencies in individuals' temporal schemata as the underlying mechanism, they will likely never solve the correct problem. Interestingly, this line of thinking suggests that some activities historically scheduled at the unit or organizational level (e.g., monthly goals or annual performance reviews) may need to be *less* entrained to the collective and more customized to the individual. This recommendation is potentially provocative given that many organizations have recently rescinded individualized work arrangements (e.g., Yahoo, IBM, Aetna; James, 2017; Miller & Rampbell, 2013). In contrast, we recommend that organizations individualize their structures even more. We do not suggest extreme individualization, which may be an administrative impossibility (cf. Langfred & Rockmann, 2016), but rather a greater awareness of time and a margin for flexibility (e.g., asking individuals what timing works for them and loosening inflexible schedules). Newer technologies for coordination such as Slack and Microsoft Teams may even enable emerging forms of coordination by offering asynchronous repositories of team progress. In contrast to fixed weekly meetings, these technologies may instead facilitate *windows* of entrainment that accommodate individual variability in beginnings, endings, pace and the like.

In contrast, in cases where entrainment is required and individualized approaches are limited, our theorizing indicates that the best way to induce deliberate entrainment is to offer greater information certainty. As shown in Table 1, whereas greater uncertainty tends to lead to resistance, deliberate entrainment is likely when there are clear and consistent cues about timing. Thus, to overcome individuals' assessments of inconsistency, managers should focus on being as clear as possible with timing norms. We note a paradox here, however, in that deliberate

entrainment may produce the intended behavior but such certainty may prohibit other more positive outcomes, such as constructive resistance or the creation of substructure. Thus, increasing certainty in a situation's timing should only occur when the risks of losing temporal innovations (and eventually employees) are outweighed by the benefits of achieving entrainment.

In addition, Table 1 also demonstrates that the beneficial behaviors in our model (i.e., deliberate entrainment, active/constructive resistance, and creation) require at least some interdependence combined with high levels of future interaction. Therefore, managers must design systems where people truly need each other to perform, both today and in the future. This means that individualized job design and reward systems are not appropriate for situations in which coordination is necessary. Such a conclusion is not new (e.g., Kerr, 1975), yet most individuals are still evaluated by whether their own tasks are done on time and whether they are a team player *within* their department. In contrast, for cross-functional teams, which are incredibly common in large organizations, individuals should receive incentives tied specifically to the cross-functional team. Such reward structures are rare but necessary to facilitate entrainment. Employees also need to participate in the development of goals and plans to appreciate how future interdependence with one's team is necessary for future performance.

Lastly, managers need to be aware that their views of employee performance over time might be biased by whether entrainment behaviors are observed. Whereas two employees may perform equivalently in terms of outcomes, the one whose timing is more consistent with the organization's temporal structure may be assessed more positively. Using our example of a product launch, employees who entrain may be rated higher than those who resist or only partially entrain, even if their outputs are the same. Given our conclusions that entrainment is not always positive, managers should be wary of thinking that success appears only on one timeline.

CONCLUSION

We proposed that how people think about and use time varies within an organization's temporal structures. By explaining how individuals interpret temporal cues in different ways

based on their temporal schemata, we argued that the degree and type of entrainment can differ across individuals, reflecting an individual-level view that includes cognitive and affective aspects. This theorizing provides greater understanding of individual responses to situations by accounting for both organizational temporal cues and individuals' temporal schemata, creating an individual-level model that explains how individuals make sense of and use time at work.

REFERENCES

Adam, B. 1990. ***Time & Social Theory.*** Philadelphia: Temple University Press.

Alba, J. W., & Hasher, L. 1983. Is memory schematic? ***Psychological Bulletin***, 93(2): 203.

Albert, S. A. 2013. ***When: The art of perfect timing.*** San Francisco: Jossey-Bass

Ancona, D. G., & Chong, C. L. 1996. Entrainment: Pace, cycle, and rhythm in organizational behavior. In B. M. Staw and L. L. Cummings (Eds.), ***Research in Organizational Behavior,*** 18: 251-284.

Ancona, D. G., & Chong, C. L. 1999. Cycles and synchrony: The temporal role of context in team behavior. ***Research on Managing in Groups and Teams***, 2: 33-48.

Ancona, D. G., Okhuysen, G. A., & Perlow, L. 2001. Taking time to integrate temporal research. ***Academy of Management Review,*** 26(4): 512-529.

Ancona, D., & Waller, M. J. 2007. The dance of entrainment: Temporally navigating across multiple pacers. ***Research in the Sociology of Work***, 17: 115-146.

Avital, M. 2000. Dealing with time in social inquiry: A tension between method and lived experience. ***Organization Science***, 11(6): 665-673.

Barley, S. R. 1988. On technology, time, and social order: Technically induced change in the temporal organization of radiological work. In F. Dubinskas (Ed.), ***Making time: Ethnographies of high-technology organizations***: 123-169. Philadelphia: Temple University Press.

Bartlett, F. C. 1932. ***Remembering***. Cambridge: Cambridge University Press.

Berger, P., & Luckmann, T. 1966. ***The social construction of knowledge: A treatise in the sociology of knowledge***. New York: Doubleday.

Blount, S., & Janicik, G. A. 2001. When plans change: Examining how people evaluate timing changes in work organizations. ***Academy of Management Review***, 26(4): 566-585.

Blount, S., & Janicik, G. A. 2002. Getting and staying in-pace: The in-synch preference and its implications for work groups. ***Research on Managing Groups and Teams***, 4: 235-266.

Bluedorn, A. C. 2002. ***The human organization of time: Temporal realities and experience.*** Stanford, CA: Stanford Business Books.

Bodenhausen, G. V. 1990. Stereotypes as judgmental heuristics: Evidence of circadian variations in discrimination. ***Psychological Science***, 1(5): 319-322.

Burris, E. R., Detert, J. R., & Chiaburu, D. S. 2008. Quitting before leaving: The mediating effects of psychological attachment and detachment on voice. ***Journal of Applied Psychology***, 93(4): 912-922.

Butler, R. 1995. Time in organizations: Its experience, explanations and effects. ***Organization Studies***, 16(6): 925-950.

Call, M. L., Nyberg, A. J., & Thatcher, S. 2015. Stargazing: An integrative conceptual review, theoretical reconciliation, and extension for star employee research. ***Journal of Applied Psychology***, 100(3): 623.

Carpenter, N. C., & Berry, C. M. (2017). Are counterproductive work behavior and withdrawal empirically distinct? A meta-analytic investigation. ***Journal of Management,*** 43(3): 834–863.

Claggett, J. L., & Karahanna, E. 2018. Unpacking the structure of coordination mechanisms and the role of relational coordination in an era of digitally mediated work processes. ***Academy of Management Review***, 43(4): 704-722.

Criscuolo, P., Salter, A., & Ter Wal, A. L. 2013. Going underground: Bootlegging and individual innovative performance. ***Organization Science,*** 25(5): 1287-1305.

Dai, H., Milkman, K. L., & Riis, J. 2014. The fresh start effect: Temporal landmarks motivate aspirational behavior. ***Management Science,*** 60(10): 2563-2582.

Edwards, J. R. 2008. Person–environment fit in organizations: An assessment of theoretical progress. ***Academy of Management Annals***, 2(1): 167-230.

Farrell, D. 1983. Exit, voice, loyalty, and neglect as responses to job dissatisfaction: A multidimensional scaling study. ***Academy of Management Journal***, 26(4): 596-607.

Fiske, S. T., & Taylor, S. E. 1991. ***Social cognition*** (2nd Ed.). Reading, MA: Addison-Wesley.

Follmer, E., Talbot, D., Kristof-Brown, A., Astrove, S., & Billsberry, J. 2018. Misfits fitting in: A qualitative study of the efforts involved in achieving person-environment fit. ***Academy of Management Journal,*** 61(2): 440-465.

George, J. M., & Jones, G. R. 2000. The role of time in theory and theory building. ***Journal of Management***, 26: 657-684.

George, J. M., & Jones, G. R. 2001. Towards a process model of individual change in organizations. ***Human Relations***, 54(4): 419-444.

Gersick C. J. 1988. Time and transition in work teams: Toward a new model of group development. ***Academy of Management Journal***, 31: 9-41.

Gersick, C. J. 1994. Pacing strategic change: The case of a new venture. ***Academy of Management Journal***, 37(1): 9-45.

Gevers, J. M. P., Mohammed, S., & Baytalskaya, N. 2015. The conceptualisation and measurement of pacing styles. ***Applied Psychology***, 64: 499–540.

Gevers, J. M. P., Rutte, C. G., & Van Eerde, W. 2006. Meeting deadlines in work groups: Implicit and explicit mechanisms. ***Applied Psychology***, 55(1): 52-72.

Giddens, A. 1984. ***The constitution of society: Outline of the theory of structure.*** University of California Press, Berkeley, CA.

Gioia, D. A., & Poole, P. P. 1984. Scripts in organizational behavior. ***Academy of Management Review,*** 9(3): 449-459.

Goodman, P. S., Lawrence, B.S., Ancona, D. G., & Tushman, M. L. 2001. Introduction to the special issue. ***Academy of Management Review,*** 16(4): 507-511.

Granqvist, N., & Gustafsson, R. 2016. Temporal institutional work. ***Academy of Management Journal***, 59(3), 1009-1035.

Hall, E. T. 1983. ***The dance of life: The other dimension of time.*** New York: Doubleday.

Harris, S. G. 1994. Organizational culture and individual sensemaking: A schema-based

perspective. ***Organization Science***, 5(3): 309-321.

Hassard, J. 1991. Aspects of time in organization. ***Human Relations***, 44(2): 105-125.

Hirschman, A. O. 1970. ***Exit, voice, and loyalty: Responses to decline in firms, organizations, and states.*** Cambridge, MA: Harvard University Press

James, G. 2017. The real cost of Aetna's work-from-home reversal. ***Inc.com,*** July 5: https://www.inc.com/geoffrey-james/aetnas-no-more-work-from-home-policy-cost-them-1-.html.

Jaques, E. 1982. ***The form of time.*** New York: Crane Russak & Co.

Jansen, K. J., & Shipp, A. J. 2019. Fitting as a temporal sensemaking process: Shifting trajectories and stable themes. ***Human Relations***, 72(7): 1154–1186.

Johns, G. 2018. Advances in the treatment of context in organizational research. ***Annual Review of Organizational Psychology and Organizational Behavior***, 5: 21-46.

Katz, D., & Kahn, R. L. 1978. ***The Social Psychology of Organizations*** (Vol. 2). New York: Wiley.

Kelley, H. H., Holmes, J. G., Kerr, N. L., Reis, H. T., Rusbult, C., van Lange, P. A. M. 2003. ***An Atlas of Interpersonal Situations.*** New York: Cambridge University Press.

Kerr, S. 1975. On the folly of rewarding A, while hoping for B. ***Academy of Management Journal***, 18(4): 769-783.

Labianca, G., Moon, H. & Watt, I. 2005. When is an hour not 60 minutes? Deadlines, temporal schemata, and individual and task group performance. ***Academy of Management Journal,*** 48(4): 677-694.

Langfred, C. W., & Rockmann, K. W. 2016. The push and pull of autonomy. ***Group & Organization Management,*** 41(5): 629-657.

Larsen, R. J., & Kasimatis, M. 1990. Individual differences in entrainment of mood to the weekly calendar. ***Journal of Personality and Social Psychology***, 58(1): 164.

Larsen, S. F., Thompson, C. P., & Hansen, T. 1995. In D. C. Rubin (Ed.), ***Remembering our***

past: Studies in autobiographical memory: 129-156. Cambridge, UK: Cambridge University Press.

Leroy, S., Shipp, A. J., Blount, S., & Licht, J. G. 2015. Synchrony preference: Why some people go with the flow and some don't. ***Personnel Psychology***, 68: 759-809.

Levine, R. 1997. ***A geography of time: The temporal misadventures of a social psychologist***. New York: Basic Books.

Louis, M. R., & Sutton, R. I. 1991. Switching cognitive gears: From habits of mind to active thinking. ***Human Relations***, 44(1): 55-76.

Mainemelis, C. 2010. Stealing fire: Creative deviance in the evolution of new ideas. ***Academy of Management Review***, 35(4): 558-578.

Maitlis, S., & Christianson, M. 2014. Sensemaking in organizations: Taking stock and moving forward. ***Academy of Management Annals***, 8(1): 57-125.

McGrath, J. E. 1990. Time matters in groups. In J. Galegher, R. E. Kraut, & C. Egido (Eds.), ***Intellectual teamwork: Social and technological foundations of cooperative work*** (pp. 23-61). Hillsdale, NJ, US: Lawrence Erlbaum Associates, Inc.

McGrath, J. E., & Kelly, J. R. 1986. ***Time and human interaction: Toward a social psychology of time***. New York: Guilford Press.

McGrath, J. E., Kelly, J. R., Machatka, D. E. 1984. ***The social psychology of time: Entrainment of behavior in social and organizational settings***. Sage Publications, Beverly Hills, CA.

McGrath, J. E., & Rotchford, N. L. 1983. Time and behavior in organizations. ***Research in Organizational Behavior,*** 5: 57-101.

Meyer, R. D., Dalal, R. S., & Hermida, R. 2010. A review and synthesis of situational strength in the organizational sciences. ***Journal of Management***, 36: 121-140.

Miller, C. C., & Rampbell, C. 2013. Yahoo orders home workers back to the office. ***New York Times*****,** February 25: A1.

Mischel, W. 1977. The interaction of person and situation. In D. Magnusson & N. S. Endler

(Eds.), ***Personality at the crossroads: Current issues in interactional psychology***: 333-352. Hillsdale, NJ: Lawrence Erlbaum.

Mischel, W., & Shoda, Y. 1995. A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. ***Psychological Review***, 102(2): 246-268.

Mischel, W., & Shoda, Y. 1998. Reconciling processing dynamics and personality dispositions. ***Annual Review of Psychology***, 49(1): 229-258.

Mischel, W., & Shoda, Y. 2010. The situated person. In B. Mesquita, L. F. Barrett, & E. R. Smith (Eds.), ***The mind in context****:* 149-173. New York: Guilford Press.

Mitchell, T. R., & James, L. R. 2001. Building better theory: Time and the specification of when things happen. ***Academy of Management Review,*** 26(4): 530-547.

Morgeson, F. P., Mitchell, T. R., & Liu, D. 2015. Event system theory: An event-oriented approach to the organizational sciences. ***Academy of Management Review***, 40(4): 515-537.

Morrison, E. W. 2014. Employee voice and silence. ***Annual Review of Organizational Psychology and Organizational Behavior***, 1: 173-197.

Okhuysen, G. A., & Bechky, B. A. 2009. Coordination in organizations: An integrative perspective. ***The Academy of Management Annals***, 3(1): 463-502.

Okhuysen, G. A., & Waller, M. J. 2002. Focusing on midpoint transitions: An analysis of boundary conditions. ***Academy of Management Journal***, 45(5): 1056-1065.

Orlikowski, W. J., & Yates, J. 2002. It's about time: Temporal structuring in organizations. ***Organization Science***, 13(6): 684-700.

Perlow, L. A. 1999. The time famine: Toward a sociology of work time. ***Administrative Science Quarterly***, 44(1): 57-81.

Pfeffer, J. 1981. ***Power in Organizations***. Marshfield, MA: Pittman.

Reis, H. T. 2008. Reinvigorating the concept of situation in social psychology. ***Personality and***

Social Psychology Review**,** 12(4): 311–329.

Robinson, J. A. 1986. Temporal reference systems and autobiographical memory. In D. C. Rubin (Ed.), ***Autobiographical memory:*** 159-188. Cambridge: Cambridge University Press.

Roe, R. A. 2008. Time in applied psychology: Studying what happens rather than what is. ***The European Psychologist****,* 13(1): 37-52.

Rusbult, C. E., Farrell, D., Rogers, G., & Mainous, A. G. 1988. Impact of exchange variables on exit, voice, loyalty, and neglect: An integrative model of responses to declining job satisfaction. ***Academy of Management Journal***, 31(3): 599-627.

Sandberg, J., & Tsoukas, H. 2015. Making sense of the sensemaking perspective: Its constituents, limitations, and opportunities for further development. ***Journal of Organizational Behavior***, 36: S6-S32.

Schmidt, A. M., Dolis, C. M., & Tolli, A. P. 2009. A matter of time: Individual differences, contextual dynamics, and goal progress effects on multiple-goal self-regulation. ***Journal of Applied Psychology***, 94: 692-709.

Shipp, A. J., Edwards, J. R., & Lambert, L. S. 2009. Conceptualization and measurement of temporal focus: The subjective experience of the past, present, and future. ***Organizational Behavior and Human Decision Processes****,* 110(1): 1-22.

Shipp, A. J., & Fried, Y. 2014. Time research in management: Using temporal ambassadors to translate ideas into reality. In A. J. Shipp & Y. Fried (Eds.), ***Time and work: How time impacts individuals,*** 1: 1-10. East Sussex, UK: Psychology Press.

Shoda, Y., & Mischel, W. 2006. Applying meta-theory to achieve generalisability and precision in personality science**.** ***Applied Psychology***, 55(3): 439-452.

Sorokin, P. A., & Merton, R. K. 1937. Social time: A methodological and functional analysis. ***American Journal of Sociology***, 42(5): 615-629.

Spector, P. E., Fox, S., Penney, L. M., Bruursema, K., Goh, A., & Kessler, S. 2006. The dimensionality of counterproductivity: Are all counterproductive behaviors created

equal? ***Journal of Vocational Behavior***, 68(3): 446-460.

Steel, P., & König, C. J. 2006. Integrating theories of motivation. ***Academy of Management Review***, 31: 889-913.

Taylor, S. E, & Crocker, J. 1981. Schematic bases of social information processing. In E. T. Higgins, C. P. Herman, & M. P. Zanna (Eds.), ***Social cognition***: 89-134. Hillsdale, NJ: Erlbaum.

Tsoukas, H. 2017. Don't simplify, complexify: From disjunctive to conjunctive theorizing in organization and management studies. ***Journal of Management Studies***, 54(2): 132-153.

Van de Ven, A. H., & Poole, M. S. 1995. Explaining development and change in organizations. ***Academy of Management Review,*** 20(3): 510-540.

Waller, M. J., Conte, J. M., Gibson, C. B., & Carpenter, M. A. 2001. The effect of individual perceptions of deadlines on team performance. ***Academy of Management Review***, 26(4): 586-600.

Waller M. J., Zellmer-Bruhn, M. E., & Giambatista, R. C. 2002. Watching the clock: Group pacing behavior under dynamic deadlines. ***Academy of Management Journal***, 45: 1046-1055.

Walsh, J. P. 1995. Managerial and organizational cognition: Notes from a trip down memory lane. ***Organization Science***, 6: 280-321.

Warren, D. E. 2003. Constructive and destructive deviance in organizations. ***Academy of Management Review,*** 28(4): 622-632.

Watts, C., Cox, T., & Robson, J. 1983. Morningness-eveningness and diurnal variations in self-reported mood. ***The Journal of Psychology***, 113(2): 251-256.

Weigert, A. J. 1981. ***Sociology of everyday life***. New York: Longman.

Weiss, H. M., & Cropanzano, R. 1996. Affective events theory: A theoretical discussion of the structure, causes and consequences of affective experiences at work. ***Research in Organizational Behavior,*** 18: 1-74.

Yakura, E. K. 2002. Charting time: Timelines as temporal boundary objects. ***Academy of Management Journal***, 45(5): 956-970.

Yam, K. C., Fehr, R., & Barnes, C. M. 2014. Morning employees are perceived as better employees: Employees' start times influence supervisor performance ratings. ***Journal of Applied Psychology***, 99(6): 1288-1299.

Zaheer, S., Albert, S., & Zaheer, A. 1999. Time scales and organizational theory. ***Academy of Management Review,*** 24(4): 725-741.

Zerubavel, E. 1981. ***Hidden rhythms: Schedules and calendars in social life***. Chicago: University of Chicago Press.

Zerubavel, E. 1985. ***The seven-day circle: The history and meaning of the week.*** New York: Free Press.

Zimmerman, R. D., Swider, B. W., Woo, S. E, & Allen, D. G. 2016. Who withdraws? Psychological individual differences and employee withdrawal behaviors. ***Journal of Applied Psychology***, 101(4): 498-519.

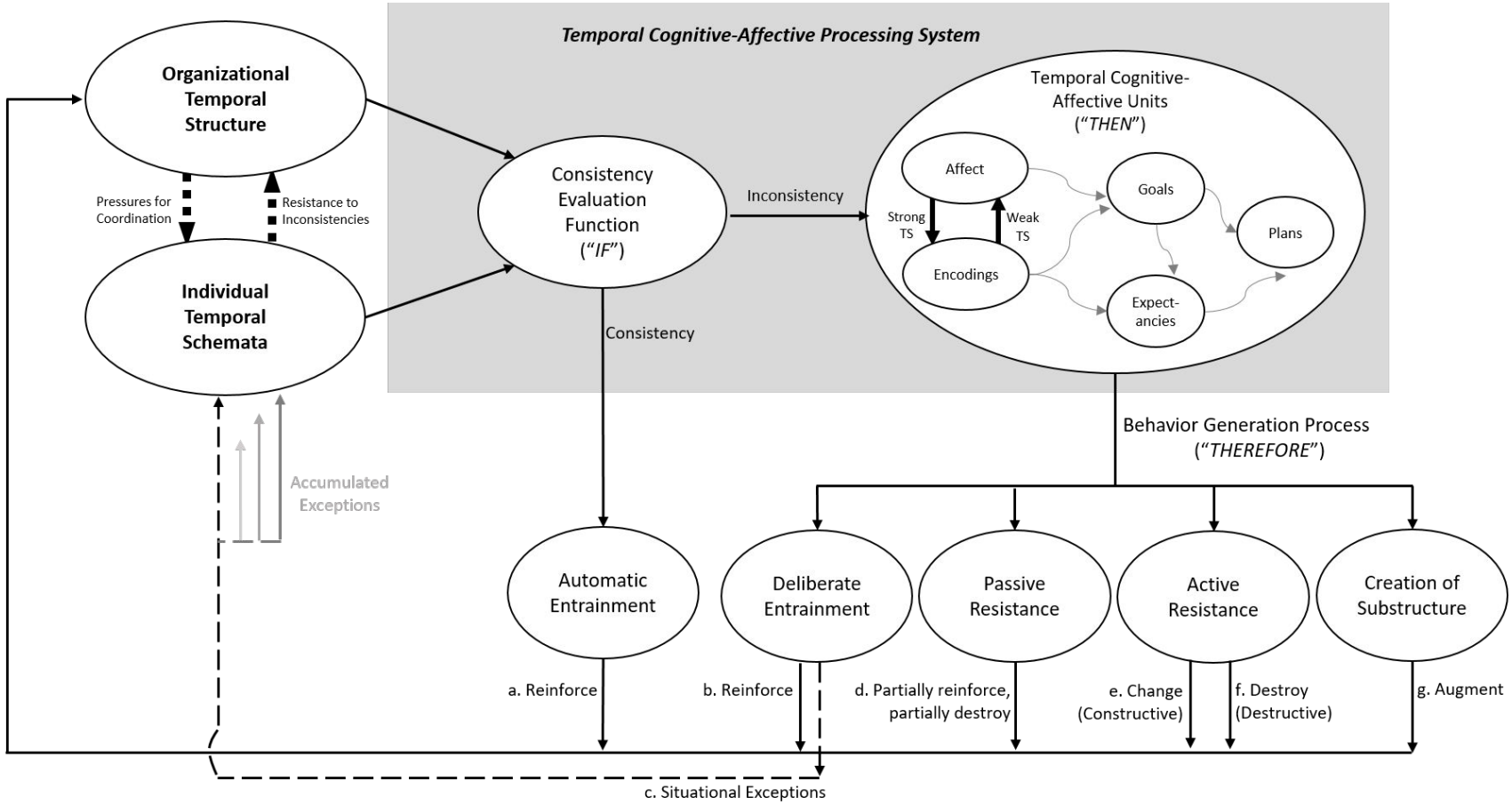
TABLE 1

Characteristics and Implications of Individuals' Choices to Entrain to, Resist, or Create Structure

	Potential Behavioral Outcomes				
	Deliberate Entrainment	**Passive Resistance**	**Active/Constructive Resistance**	**Active/Destructive Resistance**	**Creation of Substructure**
Characteristics of Situations					
Outcome Interdependence	High interdependence	Low to moderate interdependence	Moderate interdependence	Low interdependence	Any level of interdependence
Mutuality of Power	Low power	Low to moderate power	High power	High power	Any level of power
Information Uncertainty	Low uncertainty	High uncertainty	High uncertainty	High uncertainty	High uncertainty
Future Interaction	High likelihood of interaction	Low likelihood of interaction	High likelihood of interaction	Low likelihood of interaction	High likelihood of interaction
Degree of Entrainment	Full	Partial	None	None	Full
Behavioral Persistence	Temporary if more affective; Sustained if more cognitive	Temporary	Temporary	Temporary	Sustained
Implications	Short-term challenges if more affective; Long-term benefits if more cognitive	Short-term and long-term challenges	Short-term challenges; Potential long-term benefits	Short-term and long-term challenges	Long-term benefits, especially if interdependence is high

FIGURE 1

How Temporal Schemata Influence When Individuals Entrain versus Resist or Create Temporal Structure



Note: Bold arrows between the temporal cognitive-affective units show how processing begins based on the stregnth of the temporal schemata (TS). Curved arrows among the remaining units are simply illustrative of possible sequencing, which will be specific to the situation at hand.

Author Biographies

Abbie J. Shipp (a.shipp@tcu.edu) is a professor of management at Texas Christian University. She earned her Ph.D. in organizational behavior from the University of North Carolina. Her research focuses on the psychological experience of time including trajectories of work experiences, temporal focus, experiencing change, and person-environment fit over time.

Hettie A. Richardson (h.richardson@tcu.edu) is a professor of management at Texas Christian University. She earned her Ph.D. in organizational behavior and human resource management from the University of Georgia. Her current research interests include empowerment, employee involvement, strategic human resource management, and methods-related topics.