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How Fair versus How Long: An Integrative Theory-Based Examination

of Procedural Justice and Procedural Timeliness

Ryan Outlaw
Kelley School of Business
Indiana University
801 W. Michigan Street
Indianapolis, IN 46202
Phone: (317) 278-7437
Email: croutlaw@iu.edu
Jason A. Colquitt
Terry College of Business
University of Georgia
C210 Benson Hall
Athens, GA 30602
Phone: (706) 542-3745
Email: colq@uga.edu
Michael D. Baer

Department of Management & Entrepreneurship

W. P. Carey School of Business

Arizona State University

P.O. Box 874006

Tempe, AZ 85287-4006

mikebaer@asu.edu
Hudson Sessions
Charles H. Lundquist College of Business
University of Oregon
1208 University St.
Eugene, OR 97403
Phone: (541) 346-3303
Email: hudson.sessions@asu.edu

Abstract

Although studies have linked procedural justice to a range of positive attitudes and behaviors, the focus on justice has neglected other aspects of decision-making procedures. We explore one of those neglected aspects: *procedural timeliness*—defined as the degree to which procedures are started and completed within an acceptable time frame. Do employees react to how long a procedure takes, not just how fair it seems to be? To explore that question, we examined the potential effects of procedural timeliness using six theories created to explain the benefits of procedural justice. This integrative theory-based approach allowed us to explore whether "how long" had unique effects apart from "how fair." The results of a three-wave, two-source field study showed that procedural timeliness had a significant indirect effect on citizenship behavior through many of the theory-based mechanisms, even when controlling for procedural justice. A laboratory study then replicated those effects while distinguishing procedures that were too fast versus too slow. We discuss the implications of our results for research on fostering citizenship behavior and improving supervisors' decision-making procedures.

How Fair versus How Long: An Integrative Theory-Based Examination

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The Sixth Amendment to the United States Constitution—part of the Bill of Rights— entitles citizens to an "impartial" and "speedy" trial. The "impartial" component of that Constitutional amendment has gone on to become a core element in judging the effectiveness of legal procedures. For example, in their foundational work on procedural justice, Thibaut and Walker (1975) showed that having two competing attorneys—each representing their side—was perceived as more just during trials than having one attorney represent both sides. As another example, Tyler (1984) showed that defendants in traffic and misdemeanor courts

evaluated judges more favorably when the judges weighed the evidence for both sides equally. Such concepts were later applied to decision-making procedures in organizational settings, helping to give rise to the *procedural justice* literature (Folger & Greenberg, 1985; Greenberg, 1986; Leventhal, 1980). Studies of procedural justice have subsequently linked impartiality (along with voice, consistency, accuracy, and correctability) to a host of beneficial employee reactions (Colquitt et al., 2013).

Curiously, such organizational research has largely ignored the "speedy" component of the Sixth Amendment. Yet, a comprehensive report of trial times in civil and criminal cases urged judges to devote more attention to being timely—not merely to being just (Sipes & Oram, 1988). Might *procedural timeliness* matter to employees as well? When employees consider the procedures that supervisors use to decide pay, rewards, evaluations, promotions, assignments, requests, proposals, and grievances, might they consider *whether procedures were started and completed within an acceptable time frame*? That is, might employees react positively when procedures are not too long or too short, but "just right" from a time perspective? On the one hand, timeliness may seem like a less "lofty" criterion for judging supervisor decision making. On the other hand, timeliness could be salient to employees because it may be more clear and easily perceivable than procedural justice rules such as impartiality or accuracy.

The purpose of our study was to examine whether procedural timeliness can help scholars understand key employee attitudes and behaviors, when considered alongside procedural justice. To explore this question, we examined procedural timeliness through the lens of the major theories present in the justice literature. Narrative reviews have often used justice theories as organizing tools to understand why employees care about justice, how they assess it, and what its implications are for subsequent attitudes and behaviors (Ambrose,

2002; Colquitt & Zipay, 2015; Cropanzano, Byrne, Bobocel, & Rupp, 2001a; Cropanzano, Rupp, Mohler, & Schminke, 2001b). Six theories have emerged as particularly salient frameworks for understanding those questions. Four of those theories were introduced by justice scholars in the past two decades: the group engagement model (Tyler & Blader, 2003), fairness heuristic theory (Lind, 2001; Van den Bos, 2001), uncertainty management theory (Lind & Van den Bos, 2002; Van den Bos & Lind, 2002), and fairness theory (Folger & Cropanzano, 2001). The remaining two theories are more venerable lenses that provided the foundation for more recent theorizing: equity theory (Adams, 1963) and social exchange theory (Blau, 1964) .

If procedural timeliness does matter to employees, these six theories could offer effective starting points for explaining *why* it might matter. After all, these theories have proven effective in explaining why justice matters. Perhaps timeliness is capable of further "moving the needle" on the core mechanisms in these theories, making it important for procedures to maximize both "how fair" and "how long" questions. Alternatively, perhaps timeliness only offers something that justice itself already provides, suggesting that supervisors should be fair, no matter how long it takes. We examined these possibilities in two studies. First, in a field study, we linked procedural timeliness to the core mechanisms in the four more recent theories: identification (group engagement model), trust (fairness heuristic theory), anxiety (uncertainty management theory), and anger (fairness theory). That study utilized citizenship behavior as a bottom-line dependent variable because it has been predicted by procedural justice more than any other outcome (Colquitt et al., 2013). Next, in a laboratory study conducted with an experimental design, we replicated those linkages while adding in the core mechanisms in the two more venerable theories: distress (equity theory) and affective commitment (social exchange theory).

Our manuscript offers a number of theoretical, empirical, and practical implications. Theoretically, we build theory by introducing procedural timeliness as a new—or, at least, long dormant—construct to the literature. We test theory by integrating the mechanisms from six established justice theories to understand the effects of procedural timeliness. We also extend theory by explaining why those mechanisms should be relevant to procedural timeliness in addition to procedural justice. We make an empirical contribution by validating a measure of procedural timeliness that could be used alongside measures of procedural justice in studies that examine employee reactions to decision-making processes. We also replicate our findings in the laboratory while exploring potential boundary conditions. Practically, to the extent that procedural timeliness explains incremental variance in key outcomes, it should become an important consideration for supervisors throughout the decision-making process.

The Procedural Timeliness Construct

Much of the understanding of procedural justice is based in work on the effectiveness of conflict resolution procedures. Thibaut and Walker's (1975, 1978) foundational observation that procedures are more just when they offer voice grew out of a comparison of multiple methods for presenting evidence in conflict resolutions. Against that backdrop, Lissak and Sheppard (1983) conducted their own studies on what causes procedures to be effective at resolving conflicts. The authors argued that the nascent literature on conflict resolution procedures had already become too fixated on justice, at the expense of other procedural qualities. They conducted a qualitative study where managers and non-managers were asked to reflect on several disputes before being asked why the procedures used to resolve them had been effective. Results showed that the timeliness of the procedure was mentioned more often than qualities reflecting the justice of the procedure, such as

impartiality, accuracy, or voice. A subsequent quantitative study that rated the perceived importance of procedural qualities found that procedural timeliness was perceived to be as important, and often more important, than procedural justice.

Lissak and Sheppard's (1983) studies provide some support for our focus on procedural timeliness. Indeed, in reflecting on their findings, the authors summarized, "What is clear…is that (a) many more criteria appear relevant to the study of procedural effectiveness than are presently being investigated, (b) fairness is one of the more important criteria but not necessarily the only important criterion, and (c) procedure appears to be a meaningful concern of the participants in two informal dispute resolution settings. Thus, there is evidence for the need to expand our research interests in the study of procedural effectiveness" (p. 63). That need remains every bit as salient today, given that an entire literature has arisen around procedural justice, with procedural timeliness remaining largely dormant.

There are some exceptions to that dormancy that should be noted. In a laboratory study, Barrett-Howard and Tyler (1986) compared the perceived importance of procedural justice with what they termed "nonfairness criteria"—one of which was the speed with which the procedure resulted in a decision. In general, the undergraduate participants in their laboratory study viewed procedural justice as twice as important as procedural speed. Tyler and Markell (2010) conducted a survey study on attitudes about public land use decisions. Their study included an aggregate variable called "nonjustice issues," with one facet being whether the procedure takes too long to arrive at a decision. Mirroring Barrett-Howard and Tyler's (1986) results, the aggregate variable that included procedural slowness did not predict the perceived acceptability of procedures. More recently, Valkeapää and Seppälä (2014) examined attitudes toward Finnish forest policy. Their results showed that a one-item

measure of procedural speed (i.e., "Decisions are made quickly") had a curvilinear relationship with procedural satisfaction. Faster procedures were largely more satisfying, except when they became too hasty.

Other than these occasional exceptions—two of which yielded pessimistic findings—matters of timeliness have largely been confined to particular sub-facets of interactional justice. Interactional justice reflects the fairness of the interpersonal treatment received from supervisors or other organizational agents (Bies, 2015; Bies & Moag, 1986). Bies and Moag (1986) argued that interactional justice is fostered when organizational agents attend to matters of truthfulness, propriety, respect, and justification. Bies (2015) broadened the construct a bit, with a particular focus on treatment that violates human dignity. More specifically, he argued that agents should refrain from deception, derogatory judgments, disrespect, inconsiderate actions, abusive words or actions, invasion of privacy, and exposure to personal danger.

Issues of timeliness are most relevant to Bies and Moag's (1986) justification sub-facet. The authors noted that "fairness requires that decisions be justified so that the action might be understood and found acceptable" (p. 50). Although Bies and Moag (1986) described justification only as something that was present or absent, Moorman's (1991) interactional justice scale wound up including timeliness. Specifically, one of his six items asked participants whether they were given "timely feedback about the decision and its implications." Subsequent work showed that the timeliness of justifications was indeed a predictor of their perceived adequacy (Shapiro, Buttner, & Barry, 1994). Building on that work, Colquitt (2001) included the timeliness of communications about the decision as one of five "informational justice" items, to go along with four "interpersonal justice" items that captured the rest of the interactional space.

There are two important distinctions to draw between procedural timeliness and timeliness as included within the justification sub-facet of interactional justice. First, procedural timeliness can often be judged without any interaction with an organizational agent at all, assuming employees have some sense of *the onset of a procedure* and *when the procedure has culminated in a decision*. Second, studies of the timeliness of justifications focus on a different time frame—between *when the procedure has culminated in a decision* and *when feedback about that decision has been provided*. The same time frame is the subject of a related literature on feedback timeliness. For example, Gilliland (1993) argued that job applicants should be given timely feedback on selection test performance (see also Gilliland, 1995). Sapienza and Korsgaard (1996) showed that more timely feedback on task performance resulted in more favorable outcomes in an entrepreneurship simulation. McNall and Roch (2009) explored feedback on job performance as facilitated by an electronic monitoring system. They included a six-item "feedback characteristics" scale, with one item focusing on feedback timeliness.

An example may be helpful in distinguishing the time frame of relevance for procedural timeliness from the time frame of relevance for work on the timeliness of feedback and justifications. Consider a performance evaluation procedure that stretches from the beginning of October through the end of January—thereby consuming 25% of the year. Employees may be aware of those starting and ending points because the process is routinized, because word-of-mouth has hinted at them, or because supervisors themselves have alluded to them. Although subjectivity will likely create variation in perceptions, it is likely that most employees would view procedural timeliness as low given that duration. Now consider two different scenarios on what happens next: (a) employees are given feedback and details on their evaluation ratings in early February, or (b) employees are not given such

feedback or details until late April. The first scenario pairs low procedural timeliness with high feedback and justification timeliness. The second scenario "adds insult to injury" by compounding low procedural timeliness with low feedback and justification timeliness.

How exactly might employees judge procedural timeliness in a scenario like the one above? How might they consider whether the time between the onset of a procedure and its conclusion is acceptable? We suspect the perceptual process is somewhat similar to the one used to form equity perceptions. Equity theory argues that the fairness of outcomes is judged by comparing one's ratio of outcomes to inputs to those of some comparison other (Adams, 1965). In the same way that a comparison other creates a baseline expectation for equity, we suspect that employees compare procedural time frames to some baseline expectation. Timeliness is then perceived to be strong when the duration is similar to that expectation rather than surprisingly shorter or longer. In addition, that baseline expectation—much like the case with equity—is subjective and idiosyncratic. Returning to the performance evaluation procedure example, two different employees may react to the October to January time frame through the prism of different expectations. One employee might have a sense of how much paperwork is involved, how many levels of the organization get consulted, and how much other work the supervisor has. The other employee might know few of those details, and might have worked for supervisors and organizations that were unusually efficient in such matters.

Considering a Parallel Theoretical Universe

Regardless of how exactly such perceptions are formed, plucking procedural timeliness out of its dormancy requires a conceptual approach that outlines why it might matter to employees. In considering this question, we were drawn to the notion of what might be called a "parallel theoretical universe." That is, if scholars had built on Thibaut and

Walker's (1975, 1978) and Lissak and Sheppard's (1983) foundational work by studying *both* procedural justice *and* procedural timeliness, what might the literature look like? One possibility is that the theories that developed after 1983 to explain the importance of justice—like the group engagement model, fairness heuristic theory, uncertainty management theory, and fairness theory—would have been used to explain the importance of timeliness as well.

Thus, embedding procedural timeliness in these four subsequent models seemed like a useful starting point for beginning to understand its importance. These models also provided mechanisms for linking timeliness to a more bottom-line outcome for organizations. Citizenship behavior reflects actions that support the psychological environment in which work occurs, with such actions typically being less specified in job descriptions and less formally rewarded (Organ, 1997). Studies have shown that units that engage in more citizenship behavior enjoy more efficiency, higher quality, better customer service, less turnover, and increased profitability (for a review, see Podsakoff, Podsakoff, Mackenzie, Maynes, & Spoelma, 2013). One reason for the initial and continued interest in procedural justice was its ability to predict citizenship behavior (Greenberg, 1993; Organ & Moorman, 1993). If procedural timeliness had been included in such work in our "parallel theoretical universe," would it have possessed that same utility? We explore that question by first examining timeliness through the lens of the group engagement model, fairness heuristic theory, uncertainty management theory, and fairness theory.

Group Engagement Model

The group engagement model grew out of earlier work on the group value and relational perspectives on justice (Tyler & Blader, 2003; see also Lind & Tyler, 1988; Tyler & Lind, 1992). The group engagement model helps explain why procedural justice leads to cooperative behavior in groups, using social identity mechanisms to explain that connection.

Specifically, the model argues that employees view the justice of procedures as carrying

useful identity-related information. Fair procedures deepen identification with groups, which

results in more intense cooperation on the part of employees (Tyler & Blader, 2003).

Applications of the group engagement model have therefore focused on *identification*

as a key mechanism linking justice to beneficial reactions (Blader & Tyler, 2009; Tyler &

Blader, 2000; Tyler & Degoey, 1995). Identification is defined as a perception of oneness

with or belongingness to some focal person or group (Ashforth & Mael, 1989). When

employees identify with their supervisors, they merge their sense of self with their

supervisors—defining themselves in terms of that work relationship (Tyler & Blader, 2003).

Justice should encourage such identification because fair treatment illustrates that employees

are respected as people. In addition, fair treatment could trigger a sense of pride in

supervisors, making it more desirable to merge identities with them. Those senses of respect

and pride, taken together, allow employees to feel more secure about identifying with

supervisors.

Should procedural timeliness have its own effect on identification, apart from the

effect of procedural justice? We argue that it should, because it too can trigger perceptions of

pride and being respected. Employees should feel pride toward supervisors when they view

the supervisor as deserving credit for some achievement (Lazarus, 1991). Given that timely

decision making can be challenging (Lissak & Sheppard, 1983), it could provide a trigger for

feelings of pride. In terms of being respected, supervisor actions are often viewed as esteem-

relevant cues for employees (De Cremer, Van Knippenerg, Van Knippenberg, Mullenders, &

Stinglhamber, 2005). If timely decision making is attributed to extra effort on the part of a

supervisor, it could suggest that the relationship is characterized by high levels of respect

(Liden & Maslyn, 1998). To the extent that such efforts are viewed as idiosyncratic,

employees may identify even more deeply (Ng & Feldman, 2010). In contrast, excessively short procedures could suggest the supervisor gave a decision little thought, whereas excessively long procedures could suggest that a process has been "back-burnered" or forgotten. If employees do not feel they have been made a priority, identification with the supervisor should be weakened.

The group engagement model also explains why identification should lead to citizenship behavior on the part of employees. Specifically, the model argues that employees use their sense of identification to decide how deeply they should engage with the groups to which they belong (Tyler & Blader, 2003). When identification levels are low, engagement is limited to cooperation with mandatory directives. When identification levels are high, engagement is deepened to include discretionary behaviors that occur independent of rewards or sanctions. From this perspective, citizenship behavior represents a sort of "behavioral engagement"—a manifestation of the merging of self brought about by identification (Tyler & Blader, 2003). In support of this logic, empirical studies have revealed positive linkages between identification and citizenship behavior (Blader & Tyler, 2009; Farmer, Van Dyne, & Kamdar, 2015; Levine, Prosser, Evans, & Reicher, 2005).

Hypothesis 1: When controlling for procedural justice, procedural timeliness will have a positive indirect effect on citizenship behavior through identification.

Fairness Heuristic Theory

Fairness heuristic theory also flowed out of relational perspectives on justice (Lind & Tyler, 1988; Tyler & Lind, 1992). The theory was created, in part, to understand the dynamics at play in a fundamental social dilemma—wherein cooperation brings access to important gains but brings with it the risk of exploitation (Lind, 2001). Consider a case where a supervisor asks an employee to volunteer for an extra assignment with no apparent rewards.

The employee could gain from this cooperation—by currying favor with the supervisor and earning rewards at a later time—or be exploited by it—by setting a precedent that extra effort will be given without compensation. Fairness heuristic theory argues that employees navigate that dilemma by considering whether supervisors are trustworthy. Unfortunately, employees have not always had sufficient time to gather data on the supervisor's trustworthiness, meaning they must look elsewhere for such evidence (Lind, 2001; Van den Bos, 2001). Fairness heuristic theory suggests that procedural justice can function as one piece of evidence, shaping reactions when data on trustworthiness is absent (Van den Bos, Wilke, & Lind, 1998).

Applications of fairness heuristic theory have therefore focused on *trust* as a key mechanism linking justice to beneficial reactions (e.g., Colquitt, LePine, Piccolo, Zapata, & Rich, 2012; Colquitt & Rodell, 2011; Jones & Martens, 2009). Trust is defined as the willingness of an employee to accept vulnerability to a supervisor based on positive expectations of the supervisor's behavior (Mayer, Davis, & Schoorman, 1995). Justice should serve as evidence of trustworthiness because it indicates the presence of integrity (Lind, 2001). Integrity is the sense that supervisors have a set of principles that employees find acceptable (Mayer & Davis, 1999). Designing procedures to be impartial, consistent, accurate, and correctable should illustrate such principles. Indeed, research has linked procedural justice to perceptions that supervisors have integrity and should be trusted (Colquitt et al., 2012; Colquitt & Rodell, 2011).

More relevant to our research question is whether procedural timeliness should have its own effect on trust, beyond the effect of procedural justice. One reason for expecting such an effect to emerge is that timeliness could influence other aspects of trustworthiness— aspects that lay apart from integrity. Mayer et al. (1995) noted that trustworthiness is also

based in ability—the presence of skills and competencies that enable influence in a given

domain. Research has failed to uncover a linkage between procedural justice and perceived

ability (Colquitt & Rodell, 2011), but it may be that being too fast or too slow could harm

such perceptions. Indeed, discussions of procedural timeliness highlight the skills needed to

execute procedures at the proper pace (Lissak & Sheppard, 1983; Tyler & Markell, 2010).

Moreover, reviews of managerial decision making describe being too slow as an indicator of

indecisiveness and poor organizational skills (Eisenhardt, 1990). To the extent that such

ability-based inferences occur, procedural timeliness should relate to trust for reasons that do

not overlap with the procedural justice-trust connection.

How, then, might trust give rise to citizenship behavior on the part of employees?

Fairness heuristic theory argues that trust shifts employees from a self-centered "individual

mode" to an other-focused "group mode" (Lind, 2001). In group mode, employees tend to be

focused on the greater good of the organization, even if they incur a personal cost for that

focus. For example, an employee may be willing to help a supervisor who has fallen behind,

even if it means leaving work later than usual. From this perspective, citizenship behavior

becomes a behavioral manifestation of being in "group mode." Consistent with such logic,

meta-analytic reviews have revealed significant linkages between trust and citizenship

behavior (Colquitt, Scott, & LePine, 2007; Dirks & Ferrin, 2002).

Hypothesis 2: When controlling for procedural justice, procedural timeliness will have

a positive indirect effect on citizenship behavior through trust.

Uncertainty Management Theory

Uncertainty management theory is a successor to fairness heuristic theory (Lind &

Van den Bos, 2002; Van den Bos & Lind, 2002). Whereas fairness heuristic theory focused

on uncertainty about the fundamental social dilemma, uncertainty management theory

focuses on a much broader conceptualization of uncertainty (for more on the relationship between the two theories, see Proudfoot & Lind, 2015). The theory acknowledges that employees face many sources of uncertainty in their lives—from dynamics with authority figures to the change brought by organizational events to their own mortality. When coping with such uncertainties, employees look for things they can latch onto and count on. Procedural justice becomes one of those things because procedures can exist for many years in a single form—thereby providing a long-term source of predictability (Lind & Van den Bos, 2002; Van den Bos & Lind, 2002).

Applications of uncertainty management theory have tended to utilize either affective expressions of uncertainty, such as high anxiety or low contentment, or cognitive perceptions of uncertainty, such as low predictability or high expectations of change (e.g., Colquitt et al., 2012; Desai, Sondak, & Diekmann, 2011; Van den Bos, 2001; Van den Bos & Miedema, 2000). Following Colquitt and Zipay (2015), we focus on an affective mechanism—specifically, *anxiety*. Anxiety is a feeling that occurs when facing an uncertain or vague threat (Lazarus, 1991). Justice should reduce anxiety by supplying at least some certainty in working life—certainty that outcomes important to the employee are decided in a consistent, accurate, and unbiased way. Importantly, Lind and Van den Bos (2002) argued that justice could ease anxiety even when the vague threat had nothing to do with decision-making events. They noted that the connection between justice and anxiety "is so fundamental…that it occurs whether there is a logical link between the fair treatment and the source of anxiety or not" (p. 193).

Might procedural timeliness have its own relationship with anxiety, even when controlling for procedural justice? We argue that unnecessarily long procedures present more opportunities for random events to inject noise into the procedures. Longer time durations

also provide more opportunities to ruminate about the process. Indeed, research suggests that the process of "incubating" about an issue winds up increasing the intensity associated with anxiety (Breznitz, 1971). Similarly, Valkeapää and Seppälä (2014) speculated that excessively long procedures could indicate an inefficiency on the part of the supervisor that could spawn more things to be uncertain about. At the same time, procedures that are surprisingly short could trigger questions about what exactly happened. The supervisor might have "cut corners," triggering anxiety over the quality of decision making (Valkeapää & Seppälä, 2014).

Uncertainty management theory does not describe how feelings of anxiety could impact citizenship behavior. However, applications of that lens have argued that uncertainty causes employees to restrict their behaviors and eschew any actions that are unnecessary (e.g., Colquitt et al., 2012). Such assertions are consistent with action tendencies associated with anxiety, including withdrawal or avoidance (Lazarus, 1991). Citizenship behavior tends to require a more expansive role definition, as it involves executing actions that are not strictly required (Tepper, Lockhart, & Hoobler, 2001). The stressful aspects of experiencing anxiety should also be depleting for employees, sapping energy that could otherwise be channeled into citizenship behavior. In support of such arguments, studies have revealed a negative relationship between feelings of anxiety and citizenship behavior (e.g., Rodell & Judge, 2009).

Hypothesis 3: When controlling for procedural justice, procedural timeliness will have a positive indirect effect on citizenship behavior through anxiety.

Fairness Theory

Fairness theory seeks to answer the question of when authorities should be held accountable for negative decision events (Folger & Cropanzano, 1998, 2001). The theory

argues that blame will be placed on authorities when (a) they should have acted differently, in terms of their actions and decision making; (b) they could have acted differently, with other options open to them; and (c) employee well-being would have been better if events had played out differently. Procedural justice is especially relevant to the "should" aspect of those counterfactual mechanics. Folger and Cropanzano (1998, 2001) note that "should" questions revolve around normative issues that have a clear right and wrong. If procedures are biased or unethical, then authorities did not act in a moral manner—they did not behave as they should.

Given those right vs. wrong elements, applications of fairness theory have tended to utilize so-called "moral emotions," such as *anger* (Goldman, 2003; Umphress, Simmons, Folger, Ren, & Bobocel, 2013). Anger is felt in response to a demeaning offense against oneself or those close to oneself (Lazarus, 1991). As Folger, Cropanzano, and Goldman (2005) noted, "This angry response reflects one way that holding others accountable to standards of moral conduct, and the human capacity for experiencing a sense of injustice, serve as a line of defense against the unfettered exercise of power that would attempt to impose unfair conditions." (p. 226). From this perspective, a lack of procedural justice— perhaps due to clear bias or unappealable inaccuracies—illustrates that authorities are not acting as they should. The anger that would be felt in response to that offense then becomes functional for holding authorities accountable.

The question then becomes whether procedural "untimeliness" could be deemed its own anger-inducing offense, apart from procedural injustice. We would argue that there are normative expectations for timeliness as well. Excessively long procedures should trigger a sense that the supervisor should have acted differently, given the potential attributions for such length (e.g., disengagement, unconscientiousness). Excessive length could draw strong reactions given that individuals view time as a currency with significant marginal utility

(Leclerc, Schmitt, & Dubé, 1995; Okada & Hoch, 2004). Excessively short procedures should also trigger a sense that the supervisor should have acted differently, given the potential attributions for such shortness (e.g., impatience, inattentiveness). Indeed, the counterfactuals for poor timeliness seem unusually easy to picture. It may be difficult to visualize how an inaccurate performance appraisal would be made more so. It should be straightforward, in contrast, to picture how a process that is too short or too long could be altered to be more normatively appropriate.

Fairness theory argues that anger fuels some retaliation against authorities when they are held accountable for improper treatment (Folger & Cropanzano, 1998, 2001; Folger et al., 2005). In this way, changes in behavior become the outward expression of the "righteous indignation" or the "moral outrage." The theory is less specific on the particular forms that such actions could take. That said, a meta-analysis of discrete emotions revealed that anger had a negative relationship with citizenship behavior (Shockley, Ispas, Rossi, & Levine, 2012). That relationship presumably illustrates that a restriction in extra-role behavior is being used as a form of purposeful retaliation. It may be that such actions are deemed a safer, more politically savvy expression of anger than more overtly deviant behaviors.

Hypothesis 4: When controlling for procedural justice, procedural timeliness will have a positive indirect effect on citizenship behavior through anger.

Study 1

Given that procedural timeliness is a new construct, we sought to validate a measure of it before testing our predictions. We followed Hinkin's guidelines to conduct three separate studies to develop and validate our measure (Hinkin, 1998; Hinkin & Tracey, 1999). The first two studies focused on content validity with the third focusing on discriminant validity relative to other constructs in the nomological network. These validation studies were

approved and monitored by the University of Georgia IRB (IRB# 2012-10527-1: "Content validity of 'procedural effectiveness'").

The first validation study involved seventy-six undergraduates from a large southeastern university. We used deductive item generation to create our measure, drawing on our definition of procedural timeliness as the degree to which procedures are started and completed within an acceptable time frame (Hinkin, 1998). These efforts resulted in a pool of seven items for procedural timeliness. We then used Hinkin and Tracey's (1999) quantitative approach to content validation to trim the pool of items from seven to a more manageable set of three. This procedure asks research participants to rate the degree to which the items in a scale successfully correspond to the definition of the construct. Each student was provided the procedural timeliness definition and items. Rather than responding to the items like a substantive study participant would, they rated whether each item corresponded to the timeliness definition using this scale: 1 = *Question is an extremely bad match to the definition* to 7 = *Question is an extremely good match to the definition*. We then used those item-level definitional correspondence levels to help guide our trimming decisions. The mean definitional correspondence level for the resulting three-item procedural timeliness scale was 5.63. This value matches or exceeds other uses of this technique (Colquitt, Baer, Long, & Halvorsen-Ganepola, 2014; Gardner, 2005; Hinkin & Tracey, 1999; Long, Baer, Colquitt, Outlaw, & Dhensa-Kahlon, 2015; Rodell, 2013).

The second validation study further examined the correspondence of our three-item procedural timeliness scale to its definition, while also examining an additional question. Do the items in that scale *fail to* correspond to the definition of procedural justice—suggesting that they are *not* merely additional indicators of procedural justice that lay beyond the rules articulated by Leventhal (1980) and Thibaut and Walker (1975)? Fifty participants recruited

from Amazon's Mechanical Turk (Porter, Outlaw, Gale, & Cho, in press) participated in this second validation study. Specifically, participants responded to the procedural timeliness items with the procedural timeliness definition as well as the definition of procedural justice (i.e., the degree to which procedures are just and fair). As before, participants responded to the items using this scale: 1 = *Question is an extremely bad match to the definition* to 7 = *Question is an extremely good match to the definition*.

Table 1 illustrates the definitional correspondence levels for the three timeliness items to the procedural timeliness definition and the procedural justice definition. Repeated-measures ANOVA revealed that the items had statistically significantly stronger correspondences with the procedural timeliness definition than with the procedural justice definition ($t = 12.14$, $p < .001$). Moreover, the correspondence with the timeliness definition was again at acceptable levels, relative to past results (Colquitt et al., 2014; Gardner, 2005; Hinkin & Tracey, 1999; Long et al., 2015; Rodell, 2013). Taken together, these results illustrate that the three timeliness items are more content-valid indicators of procedural timeliness than procedural justice.

The third measurement validation study focused on discriminant validity, to verify that our procedural timeliness scale was distinct from relevant correlates. This study used a sample of 217 Mechanical Turk participants. We asked participants to complete our three-item measure of procedural timeliness and measures of three variables in its nomological network: procedural justice, informational justice, and feedback timeliness. Participants rated procedural justice and informational justice using Colquitt's (2001) seven-item and five-item scales. Sample items for informational justice asked to what extent "Is [your supervisor] candid when communicating with you?" and "Does [your supervisor] communicate details in a timely manner?" We could not locate a multi-item measure of feedback timeliness. Some

articles used only single items (Bayerlein, 2014; McNall & Roch, 2009) whereas others only provided one sample item (Ilgen, Peterson, Martin, & Boeschen, 1981). Thus, we constructed a three-item scale by combining the items given in those three articles. The items included "My supervisor gives feedback in a timely and prompt manner" (McNall & Roch, 2009), "My supervisor lets me know right away when I have done a good job" (Ilgen et al., 1981), and "The feedback I receive from my supervisor is provided in time to help me improve" (Bayerlein, 2014). The correlations and descriptive statistics for procedural timeliness and the other three variables are shown in Table 2. Coefficient alphas are shown on the diagonal.

We conducted a series of Confirmative Factor Analyses (CFA's) using Mplus Version 7.3 (Muthén & Muthén, 2012). First, we conducted a CFA on the three-item scale to examine its factor loadings. The fit of that model is technically perfect (i.e., CFI = 1.00; RMSEA = .00; SRMR = .00) given that the model is saturated, but the factor loadings ranged from .76 to .88. Those factor loadings are shown in Table 1 alongside the definitional correspondence levels from the prior validation study. We then conducted a CFA that examined procedural timeliness alongside procedural justice, informational justice, and feedback timeliness. That model demonstrated an adequate fit to the data: $\chi^2 (129) = 299.42$, $p < .001$; CFI = .94; RMSEA = .08; and SRMR = .05. To assess discriminant validity, we tested alternative models where the correlation between procedural timeliness and one of its correlates was constrained to 1.0. If procedural timeliness was redundant with one of those correlates, the alternative models would not result in diminished fit. The results of chi-square difference tests revealed that our original model fit significantly better than these alternative models: $\Delta\chi^2 (1) = 45.28$, $p < .001$ for procedural justice; $\Delta\chi^2 (1) = 40.27$, $p < .001$ for informational justice; $\Delta\chi^2 (1) = 59.37$, $p < .001$ for feedback timeliness. Thus, procedural timeliness seems distinct from procedural justice, informational justice, and feedback timeliness.

Study 2: Field Study

Sample and Procedure

With the three validation studies completed, we recruited participants for our field study by posting advertisements on an online classified ads website. Our advertisements appeared in 27 major metropolitan areas located throughout the United States. Individuals interested in participating clicked on a link that brought them to an external university-hosted website that provided more details about the study. From that website, a second link directed individuals to the online registration form and Time 1 survey. In order to take part in the study, participants had to verify that they were 18 years or older, were willing to provide contact information for their supervisor who would be required to complete a survey, and worked at least 35 hours per week. Participants were paid $5 for completing each survey.

A total of 1087 employees visited the registration website. Eight hundred and eleven employees completed the Time 1 survey, for a response rate of 75 percent. Four weeks later, we sent emails containing a link to the Time 2 survey to all 811 employees. Four hundred and forty eight employees completed that second survey for a Time 2 response rate of 51 percent. Four weeks later, we sent the Time 3 survey to the employees' supervisor. Two hundred and seventeen supervisors completed the final survey for a Time 3 response rate of 48 percent. Complete data was available for 211 employee–supervisor dyads.

The average age for employees was 33.8 years ($SD = 10.72$). Employees' tenure with their organizations was, on average, 4.4 years ($SD = 3.98$) and their average tenure with their managers was 3.2 years ($SD = 2.94$). Employees were 58 percent female. Employees identified their race as 56 percent Caucasian, 19 percent African American, 10 percent Asian/Pacific Islander, 10 percent Hispanic, and five percent "other." The average age for supervisors was 41.9 years ($SD = 12.58$). Supervisors' tenure with their organizations was, on average, 8.1 years ($SD = 7.16$). Supervisors were

47 percent female and identified their race as 60 percent Caucasian, 19 percent African American, eight percent Hispanic, eight percent Asian/Pacific Islander, one percent Native American, and four percent "other."

The Time 1 survey completed by employees included measures of procedural timeliness and procedural justice. Four weeks later, we emailed a link to the Time 2 survey to employees who completed Time 1. That time separation was used to establish temporal precedence and to serve as a procedural remedy for common method bias (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Time separation removes the influence of transient affect, consistency motif, and implicit theories, and can be as effective a remedy for common method bias as source separation (Doty & Glick, 1998). The second survey included measures of identification, trust, anxiety, and anger. Four weeks later, we contacted supervisors of employees who completed the Time 1 and Time 2 surveys. These supervisors were emailed a link to complete the Time 3 survey that included a measure of citizenship behavior. This study was also approved and monitored by the University of Georgia IRB (IRB # 2013-10342-0: "Predicting Differential Effects of Procedures in Organizations").

Measures

Procedural justice. We measured procedural justice using seven items from Colquitt's (2001) procedural justice scale. Employees were asked to consider "the procedures your supervisor uses to make decisions about pay, rewards, evaluations, promotions, assignments, etc. To what extent:" Sample items included, "Are you able to express your views during those procedures?" "Are those procedures based on accurate information?" and "Are you able to appeal the decisions arrived at by those procedures?" ($\alpha = .79$; 1 = *To a very small extent* to 5 = *To a very large extent*).

Procedural timeliness. The procedural timeliness items were introduced with the same lead-in used in our procedural justice measure. Employees were asked to consider "the procedures your supervisor uses to make decisions about pay, rewards, evaluations, promotions, assignments, etc. To

what extent:" The items in Table 1 were then given (α = .91; 1 = *To a very small extent* to 5 = *To a very large extent*).

Identification. We measured identification with the supervisor using six items from Mael and Ashforth's (1992) scale. Sample items included "When someone criticizes my supervisor, it feels like a personal insult," and "My supervisor's successes are my successes" (α = .87; 1 = *Strongly disagree* to 5 = *Strongly agree*).

Trust. We measured employee trust in their supervisor using five items from Schoorman, Mayer, and Davis' (2007) and Mayer and Gavin's (2005) trust scales. Sample items included "I would be willing to let my supervisor have significant influence over my future in this company," and "I would tell my supervisor about mistakes I've made on the job, even if they could damage my reputation" (α = .81; 1 = *Strongly disagree* to 5 = *Strongly agree*).

Anxiety. We measured anxiety using six items from the PANAS-X's fear scale (Watson & Clark 1994). Participants were instructed to indicate the extent to which they "feel this way when thinking about or interacting with [their] immediate supervisor." Sample items included "Nervous," "Scared," and "Jittery" (α = .96; 1 = *Very slightly or not at all* to 5 = *Extremely*).

Anger. We measured anger using three items from Fredrickson, Tugade, Waugh, and Larkin (2003). Participants again indicated the extent to which they "feel this way when thinking about or interacting with [their] immediate supervisor." Items included "Angry," "Irritated," and "Annoyed" (α = .83; 1 = *Very slightly or not at all* to 5 = *Extremely*).

Citizenship behavior. Supervisors rated employee citizenship behavior using five items adapted from Lee and Allen's (2002) scale. Supervisors were asked to indicate the extent to which they agreed or disagreed with the statements. Sample items included "Assists you with your work (when not asked)," "Passes along information to you," and "Takes time to listen to your problems and worries." (α = .93; 1 = *Strongly disagree* to 7 = *Strongly agree*).

Control variables

We investigated several controls when testing our field study hypotheses. Those included employee age, gender, tenure with the organization, and tenure with the supervisor. We also included a measure of employee neuroticism (Donnellan, Oswald, Baird, & Lucas, 2006) as a potential statistical remedy for common method bias (Podsakoff et al., 2003). In deciding whether to include these variables in our hypothesis testing, we adopted the following criteria for inclusion: (a) the control needed to be significantly related to our independent, mediating, and dependent variables; and (b) the inclusion vs. exclusion of the control needed to alter the results of our significance testing. None of the variables we considered met those criteria. Thus, consistent with recommendations by Carlson and Wu (2012) and Becker (2005), we omitted them from the final version of our analyses.

Study 2: Results and Discussion

Descriptive Statistics

The means, standard deviations, and zero-order correlations are presented in Table 3 with coefficient alphas shown along the diagonal.

Tests of Hypotheses

We used Mplus Version 7.3 (Muthén & Muthén, 2012) to test our hypotheses. We first tested the fit of our measurement model using item-level indicators. Our a priori seven-factor model demonstrated an adequate fit to the data: χ^2 (539) = 812.88, $p < .001$; CFI = .94; RMSEA = .05; and SRMR = .06. As in the third validation study, we tested an alternative model where the correlation between procedural justice and procedural timeliness was constrained to 1.0. If procedural justice and procedural timeliness were redundant constructs, this alternative model would not result in diminished fit. The results revealed that our original model fit significantly better than this alternative model: $\Delta\chi^2$

(1) = 95.27, *p* < .001, further supporting the discriminant validity between procedural justice and procedural timeliness.

Having found support for our proposed measurement model, we tested the structural model in Figure 1. We allowed our exogenous predictors to covary, as is the default in most structural equation modeling packages. We also modeled direct effects of procedural justice and procedural timeliness on citizenship behavior, given that direct effects are needed to interpret the magnitude of indirect effects (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). We also modeled disturbance covariances between identification and trust, and between anxiety and anger, given the common supervisor referent. That model provided an adequate fit: χ^2 (543) = 845.29, *p* < .001; CFI = .93; RMSEA = .05; SRMR = .07. Figure 1 provides unstandardized path coefficients from Mplus.

Turning to the test of our indirect effect hypotheses, we note that the product of two variables is usually non-normally distributed (MacKinnon, Lockwood, & Williams, 2004) and therefore problematic. To address this issue, we followed recommendations from Tofighi and MacKinnon (2011) and used RMediation in conjunction with the R software package to simulate the sampling distribution of the indirect effect. The indirect effects from procedural timeliness to citizenship behavior are presented in Table 4. Although not hypothesized, indirect effects from procedural justice to citizenship behavior are also presented in Table 4 for comparative purposes.

Hypothesis 1 predicted that, when controlling for procedural justice, procedural timeliness would have a positive indirect effect on citizenship behavior through identification. As shown in Figure 1, timeliness had a significant relationship with identification (*b* = .32). However, identification did not have a significant relationship with citizenship behavior. Accordingly, the indirect effect from procedural timeliness to citizenship behavior through identification was not significant, failing to support Hypothesis 1.

Hypothesis 2 predicted that, when controlling for procedural justice, procedural timeliness would have a positive indirect effect on citizenship behavior through trust. As shown in Figure 1, procedural timeliness had a significant relationship with trust (b = .27) and trust had a significant relationship with citizenship behavior (b = .43). The indirect effect from procedural timeliness to citizenship behavior through trust was also significant (with an effect size of .12). Therefore, Hypothesis 2 was supported.

For Hypothesis 3, we predicted that procedural timeliness would have a positive indirect effect on citizenship behavior through anxiety. As expected, there was a negative relationship between procedural timeliness and anxiety (b = -.23). The relationship between anxiety and citizenship behavior was also negative (b = -.19). Those negative paths resulted in a positive indirect effect from procedural timeliness to citizenship behavior through anxiety (with an effect size of .04), supporting Hypothesis 3.

Finally, Hypothesis 4 predicted that procedural timeliness would have a positive indirect effect on citizenship behavior through anger. As expected, there was a negative relationship between procedural timeliness and anger (b = -.17) and there was also a negative relationship between anger and citizenship behavior (b = -.31). The product of those negative paths created a positive indirect effect from procedural timeliness to citizenship behavior through anger (with an effect size of .05), supporting Hypothesis 4.

Study 3: Experimental Replication and Extension

The findings of our field study showed that procedural timeliness was valued by employees even when considered alongside procedural justice. Specifically, procedural timeliness had significant incremental effects on mechanisms found in four different theories that were introduced after Lissak and Sheppard's (1983) foundational work. Indeed, procedural timeliness had more significant linkages with our mediators than did procedural

justice. These results suggest that there may be benefits to pulling procedural timeliness out of its relative dormancy. There are, however, internal validity concerns in our field study, even given the use of source separation and time separation. We therefore sought to replicate our procedural timeliness results in a laboratory study where participants could be randomly assigned to procedures that were either timely, too long, or too short.

Given that the bulk of our contribution is encapsulated in the front half of Figure 1, we focused our laboratory study on the relationships between procedural timeliness and our theory-based mediators. The back half of Figure 1 represents more well-trodden ground, especially those linkages that have been subject to meta-analytic synthesis (Colquitt et al., 2013). Moreover, those second-stage linkages would only be tested in a correlational manner in our laboratory study—not benefiting from the internal validity advantages of random assignment. Study 3 therefore focused on the following four direct effects, each of which represents the first stage of our field study's indirect effect predictions:

Hypothesis 1: Procedural timeliness will have a positive main effect on identification.

Hypothesis 2: Procedural timeliness will have a positive main effect on trust.

Hypothesis 3: Procedural timeliness will have a negative main effect on anxiety.

Hypothesis 4: Procedural timeliness will have a negative main effect on anger.

We also took this opportunity to extend our contribution in two other ways. First, we reasoned that a "parallel theoretical universe" that included procedural timeliness would also have examined the construct using earlier formulations that predated Lissak and Sheppard (1983). That is, the introduction of timeliness would trigger a reconsideration and potential expansion of earlier perspectives that had not considered that construct. We therefore included the two more foundational theories—equity theory (Adams, 1963) and social exchange theory (Blau, 1964)—alongside the four theories featured in our field study.

Second, we explored potential boundary conditions that could amplify or neutralize the

effects of procedural timeliness. We explored two such conditions: the degree to which the

decision was highly standardized and the favorability of the resulting outcome.

Equity Theory

Equity theory stands as essentially the original theory in the justice domain. The

theory argues that, when determining how fairly they are treated, employees think about the

ratio of outcomes they receive to inputs they contribute, relative to relevant comparison

others (Adams, 1963). Outcomes can include pay, benefits, perks, status symbols, and

satisfying supervision (Adams, 1965). Inputs, in turn, can include effort, experience, training,

skills, and seniority (Adams, 1965). When the ratio of outcomes to inputs does not match

relevant comparisons, a tension results that triggers attempts to restore balance. That

restoration may involve altering outcomes or inputs, cognitively reevaluating outcomes or

inputs, or altering comparison others.

Although it is rarely operationalized, equity theory focuses on *distress* as the mediator

linking outcome/input imbalances to equity-restoring actions (Adams, 1963, 1965). Adams

and Freedman (1976, p. 49) noted, "Assume that [two people] experience advantageous and

disadvantageous inequity, respectively, in their relationship. Each feels 'distress' and is

motivated to act to reduce the inequity and to continue the relationship." That sense of

distress has much in common with Festinger's (1957) notion of cognitive dissonance. Indeed,

Adams (1963) explicitly noted that his theory was "based upon" Festinger's (1957) cognitive

dissonance theory and "was a special case of it" (p. 422). Tests of equity theory that have

operationalized distress have framed it as a form of negative affect (e.g., Austin & Walster,

1974). Where would procedural justice fit into a discussion of equity theory dynamics?

Cropanzano and Ambrose (2001) argued that, from the perspective of employees, procedures

may themselves be viewed as outcomes. This is especially logical when one realizes that procedural justice carries implications for status and satisfying supervision—two outcomes described by the theory (Adams, 1965). Indeed, laboratory studies have utilized an equity lens with procedural justice playing the role of an outcome (Ambrose, Harland, & Kulik, 1991; Grienberger, Rutte, & van Knippenberg, 1997).

The operative question for our study becomes whether procedural timeliness should have its own impact on distress, apart from procedural justice. As noted previously, time is itself viewed as a beneficial resource (Leclerc et al., 1995; Okada & Hoch, 2004), suggesting some unique relevance for timeliness in an equity discussion. Moreover, we have already argued that timely procedures should have their own implications for status-based outcomes. We would further argue that procedural timeliness should have a unique impact on satisfying supervision as well. Valkeapää and Seppälä's (2014) findings revealed that timely procedures were viewed as more satisfying procedures—as more efficient, effective, and legitimate. To the degree that such sentiments become attached to the supervisor as a whole, they would constitute high levels of another equity theory outcome. In this way, procedural timeliness would be associated with lower levels of employee distress.

Hypothesis 5: Procedural timeliness will have a negative main effect on distress.

Social Exchange Theory

Social exchange theory has become a dominant lens for understanding why fair treatment can result in beneficial behaviors toward the organization (Colquitt et al., 2013; Cropanzano et al., 2001b). The core of social exchange involves the receiving and giving of unspecified benefits between exchange partners (Blau, 1964). When a benefit is received, it deepens the bond with the exchange partner, encouraging reciprocation. According to Organ (1988, 1990), procedural justice stands as an especially salient benefit. From this perspective,

treating employees in a consistent, accurate, and unbiased manner is something that is noticed by them, deepening their bonds with the organization. How might they reciprocate for that benefit? One way is by engaging in citizenship behavior where they go "above and beyond" their work role.

Although a number of mediators have been used to capture this social exchange dynamic, *affective commitment* captures the deepened bond that can result from the receipt of benefits (Colquitt et al., 2014; Cropanzano & Byrne, 2000). Affective commitment is defined as the desire to remain a part of a relationship due to identification with and involvement in that relationship (Allen & Meyer, 1990). From this perspective, procedural justice breeds a deeper identification with the organization, with citizenship behavior then being a way of expressing a deeper involvement. In support of this logic, meta-analyses have supported a linkage between procedural justice and affective commitment (Colquitt et al., 2013), and affective commitment and citizenship behavior (Meyer, Stanley, Herscovitch, & Topolnytsky, 2002).

We argue that procedural timeliness should also be perceived as a benefit, impacting affective commitment above and beyond procedural justice. Foa and Foa (1980) described the qualities that exchange benefits tend to possess in their taxonomic analysis. Specifically, benefits possess elements of status, services, and information, among other qualities. It seems clear that procedural timeliness presents a unique combination of those kinds of qualities, relative to procedural justice. As noted in our group engagement model discussion, timely decision-making can signal to employees that they have attained a certain status in the eyes of the supervisor, relative to hasty or prolonged procedures. Procedural timeliness should also resonate as a more effective service—described by Foa and Foa (1980) as labor for another.

For all these reasons, procedural timeliness should be positively related to affective

commitment to one's supervisor.

Hypothesis 6: Procedural timeliness will have a positive main effect on affective

commitment.

Study 3: Method

Sample and Procedure

Our sample was comprised of 479 participants from Amazon's Mechanical Turk. The

average age of participants was 35.8 years ($SD = 9.87$). Participant had an average of 14.4

years ($SD = 10.03$) of work experience and 40 percent of participants identified as female.

The race reported by participants was 78 percent Caucasian, 11 percent Asian/Pacific

Islander, seven percent African American, seven percent Hispanic, and two percent Native

American. This study was approved and monitored by the Indiana University IRB (IRB #

1709377067: "Timeliness").

We presented a scenario to participants that asked them to assume that they were "an

employee at a professional services firm that offers various consulting and financial services

to its clients." Further, participants were asked to assume they had been "working with the

firm for about two years." The subsequent passages of the scenario were then used to

randomly assign participants to conditions in a three (procedural timeliness: short, timely, or

long) x two (decision standardization: low or high) x two (outcome favorability: low or high)

design.

The participants first read about the particular decision that was being made, using the

verbiage in Table 5a. We used a raise to be indicative of a highly standardized decision

because formal human resource parameters often govern raises, limiting supervisor

discretion. We used a request to approve a training seminar as a less standardized decision

because supervisors typically have more latitude over such actions. Participants were then given information on the process their supervisor uses to make decisions, reading, "As you reflect on the [report/proposal] you turned in, you realize that your supervisor tends to make decisions in a pretty fair way, in terms of using relatively accurate information, being pretty consistent, and being typically unbiased." This information was provided to control for procedural justice by making it average across conditions. The scenario then manipulated procedural timeliness using the verbiage in Table 5b, with the supervisor's decision-making process being described as either too short, timely and appropriate, or too long. Finally, the scenario manipulated outcome favorability using the verbiage in Table 5c. The participants either received the raise/permission they were looking for or failed to receive that outcome.

Manipulation Checks

Procedural timeliness. We used the three-item measure shown in Table 1 to verify that our manipulation of procedural timeliness was perceived by the participants (α = .92; 1 = *To a very small extent* to 5 = *To a very large extent*).

Decision standardization. We verified our manipulation of decision standardization in two ways. First, we created a two-item scale to check whether participants perceived that the decision was a pay raise rather than a request to attend a seminar. Participants responded to "In the scenario you just read, your supervisor was," with the items being: "Making a decision about whether you would receive a raise," and "Making a decision about whether you would receive permission to attend a training seminar (R)" (α = .98; 1 = *Strongly disagree* to 5 = *Strongly agree*). Thus, the degree of standardization was left implicit, with the presumption being that a raise was more standardized than a request to attend a seminar. The second check explicitly gauged the perceived standardization of the decision using a four-item scale. Participants read, "As best you can guess, to what extent do such decisions tend to

have the following characteristics?" with the items being: "They are likely to be standardized," "They are likely to be structured," "They are likely to have strict time boundaries for the supervisor," and "They are likely to be formalized" (α = .83; 1 = *To a very small extent* to 5 = *To a very large extent*).

Outcome favorability. We verified our outcome favorability manipulation using a three-item measure. Participants read "In terms of what happened in the scenario, please indicate your level of agreement," with the items being: "The decision regarding my [raise/ability to attend the training seminar] was favorable," "I'm satisfied with the decision regarding my [raise/ability to attend the training seminar]," and "In terms of my [raise/ability to attend the training seminar], things played out well for me" (α = .98; 1 = *Strongly disagree* to 5 = *Strongly agree*).

Measures

Identification (α = .84), trust (α = .84), anxiety (α = .93), and anger (α = .95) were measured using the same scales as in our field study.

Distress. We measured distress with a three-item measure that we developed. Participants were asked to rate the extent to which they "would feel the following emotions when thinking about or interacting with" their supervisor. Items included "Distressed," "Unsettled," and "Disquieted" (α = .93; 1 = *To a very small extent* to 5 = *To a very large extent*).

Affective commitment. We measured affective commitment with Meyer and Allen's (1997) six-item measure. Sample items included "I would really feel as if this supervisor's problems were my own" and "I would not feel a strong sense of belonging with my supervisor (R)" (α = .92; 1 = *Strongly disagree* to 5 = *Strongly agree*).

Study 3: Results and Discussion

Manipulation Checks

Analysis of variance (ANOVA) revealed a positive main effect of our procedural timeliness manipulation on our procedural timeliness check ($F = 419.11$, $p < .001$, $M = 2.30$ vs. 4.65 vs. 1.82). ANOVA also revealed a strong positive main effect of our decision standardization manipulation on whether the decision was perceived to be a raise ($F = 4383.56$, $p < .001$, $M = 1.21$ vs. 4.74) and whether the decision was perceived to be highly standardized ($F = 4.39$, $p < .05$, $M = 3.47$ vs. 3.62). Finally, ANOVA revealed a positive main effect of our outcome favorability manipulation on the outcome favorability check ($F = 1937.66$, $p < .001$, $M = 1.52$ vs. 4.67). The effects of the manipulations on our unintended manipulation checks were much weaker or near zero, as were all interaction effects. Taken together, these results suggest that our experimental manipulations were perceived as we intended.

Tests of Hypotheses

We first examined the relationships between procedural timeliness and the six theory-based mechanisms. In general, we found that procedural timeliness had a significant effect on the majority of the outcomes, with the results shown in Figure 2. ANOVA did not reveal a positive main effect on identification ($F = 1.58$, *n.s.*), failing to support Hypothesis 1. Our results did reveal a positive main effect on trust ($F = 18.18$, $p < .001$), however, supporting Hypothesis 2. ANOVA also revealed a negative main effect on anxiety ($F = 7.47$, $p < .01$) and anger ($F = 22.20$, $p < .001$), supporting Hypotheses 3 and 4. In addition, ANOVA revealed a negative main effect on distress ($F = 12.01$, $p < .001$) and a positive main effect on affective commitment ($F = 5.19$, $p < .01$). Hypotheses 5 and 6 were therefore supported.

In terms of potential boundary conditions for procedural timeliness effects, we first explored interactions between procedural timeliness and decision standardization. ANOVA

revealed a significant procedural timeliness X decision standardization interaction for anger ($F = 5.73$, $p < .01$) and distress ($F = 3.30$, $p < .05$). As shown in Figure 3, both interactions revealed that the effects of procedural timeliness were strengthened when decisions were less standardized and weakened when decisions were more standardized.

We then explored interactions between procedural timeliness and outcome favorability. ANOVA revealed a significant procedural timeliness X outcome favorability interaction for anger ($F = 5.28$, $p < .01$). As shown in Figure 4, this interaction revealed that the effect of procedural timeliness was strengthened when the outcome was unfavorable and weakened when the outcome was favorable.

General Discussion

Consistent. Accurate. Unbiased. Open to Voice. Decades of research have shown these to be powerful concepts (Leventhal, 1980; Thibaut & Walker, 1975) and it is not surprising that employees want them woven into decision-making procedures. One of the most robust findings in the literature is that perceptions of procedural justice foster citizenship behavior (Colquitt et al., 2013)—with employees willing to reward fair treatment by "going the extra mile." Our own results reinforce that consensus, as the same relationship was shown in our field study.

At first blush, "timely" seems like a concept that is less lofty than those listed above. Timeliness has also attracted less attention from philosophers and ethicists—not to mention psychologists interested in authority dynamics. And yet, timeliness did attract the attention of the framers of the United States Constitution, and was present when scholars first began to examine the procedural qualities that made for effective dispute resolution (Lissak & Sheppard, 1983). Those early studies, and the few that have occurred since, have painted a mixed picture for timeliness—with some supporting its importance and others suggesting it to be largely irrelevant (Barrett-Howard & Tyler, 1986; Lissak & Sheppard, 1983; Tyler & Markell, 2010; Valkeapää & Seppälä, 2014). Whether

because of such inconsistencies or the predictive power of justice, the literature on decision-making procedures has moved on largely without timeliness.

Our studies suggests that procedural timeliness deserves a "seat at the table" in conversations about effective procedures. Procedural timeliness had a significant relationship with citizenship behavior in our field study, as employees with supervisors who used timely procedures tended to "go the extra mile" for those supervisors. Importantly, that result held even when procedural justice was statistically controlled, revealing a "bottom-line" importance for procedural timeliness. Indeed, studies have shown that units that engage in more citizenship behavior enjoy more efficiency, higher quality, better customer service, less turnover, and increased profitability (Podsakoff et al., 2013). To the degree that procedural timeliness can foster citizenship behavior, it becomes an important construct for organizational scholars.

Theoretical Contributions

We explored that potential importance of procedural timeliness using the notion of a "parallel theoretical universe." If scholars had built on Thibaut and Walker's (1975, 1978) and Lissak and Sheppard's (1983) early work by considering procedural timeliness alongside procedural justice, it may be that the former would have been folded into the theories that arose after 1983 in the literature. That is, the group engagement model, fairness heuristic theory, uncertainty management theory, and fairness theory might not have limited their focus to why employees value justice, thereby considering timeliness as well. The same shift in emphasis might have occurred for theories introduced before 1983, like equity theory and social exchange theory. Those lenses might have been reexamined in light of the new timeliness construct.

Our results showed that this alternate reality provides a useful means of understanding why timely procedures were linked with more citizenship behavior. Specifically, procedural timeliness predicted the core mechanisms in all six of those theories. Employees with supervisors who used

timely procedures identified with them more deeply (at least in the field study), trusted them more, and felt more committed to them. In addition, when thinking about or interacting with those supervisors, the employees felt lower levels of anxiety, anger, and distress. Somewhat surprisingly, the results for procedural timeliness were actually more robust than the results for procedural justice in our field study, given that the latter failed to predict either identification or anxiety. It may be that employees are more likely to give their supervisors "credit" for timely procedures. Alternatively, it may be that timeliness is more straightforward to judge than justice, increasing its salience in employees' minds.

Of the theories included in our field study, it was the mechanisms from fairness heuristic theory, uncertainty management theory, and fairness theory that helped explain the timeliness–citizenship behavior linkage. Employees who trusted their supervisors more were more likely to engage in citizenship, presumably because they approached their work with a "group mode" mindset (Lind, 2001). Employees who felt less anxiety in reference to their supervisors were also more likely to go beyond their roles, presumably because they avoided the withdrawing tendencies that can accompany uncertainty (Colquitt et al., 2012). Finally, employees who felt less anger in reference to their supervisors engaged in more citizenship. Such employees presumably saw no need to retaliate for improper events by restricting their positive behaviors (Folger et al., 2005).

Taken together, these findings offer important theoretical contributions to the literature on effective procedures. For example, we shined a light on a concept that was valued in foundational work on effective procedures but that has become relatively dormant over time. In addition, we extended six major theories in the justice literature by using them to explain the importance of a construct *other than* justice. That constructs like identification, trust, anxiety, anger, distress, and affective commitment were able to explain the importance of procedural timeliness illustrates the utility of their respective theoretical lenses.

If replicated, the pattern of our results points to a particular importance to trust when explaining the relationship between procedural timeliness and citizenship behavior. The effects of timeliness on trust were particularly robust across our field and laboratory studies. Our field results further demonstrated that trust was the most predictive of citizenship behavior of all of the mechanisms. It may be that procedural timeliness is uniquely diagnostic of trust, because it can shed light on both the character of supervisors and their competence. Employees may infer that timely supervisors care about them and have good values, but also that timely supervisors are skilled, organized, and competent (Lissak & Sheppard, 1983; Tyler & Markell, 2010). The trust generated by such impressions should then foster citizenship by making employees less sensitive to whether extra-mile work will be exploited or taken for granted. The relationship between trust and citizenship behavior demonstrated in meta-analytic reviews provides some support for such arguments (Colquitt et al., 2007; Dirks & Ferrin, 2002).

Of course, it likely does not require six different lenses to fully capture the importance of procedural timeliness. If one considers the six theories included in our review, some level of conceptual aggregation seems possible. Most obviously, anxiety, anger, and distress are all indicative of activated state negative affect (Lazarus, 1991; Watson & Clark, 1994). All likely have similar evolutionary underpinnings, given that they help sensitize people to—and inform reactions to—threats in the environment (Watson, Wiese, Vaidya, & Tellegen, 1999). For their part, trust and affective commitment can both be viewed as indicators of a broader social exchange dynamic (Cropanzano & Byrne, 2000). Both exemplify the mutual obligation and significance that characterizes high quality work relationships (Colquitt et al., 2014). Affective commitment can also join identification as an indicator of a broader social identification dynamic. Although some organizational commitment formulations do not include the identification concept (Ashforth & Mael, 1989), affective commitment does explicitly capture a sense of oneness and belongingness (Meyer &

Allen, 1997). Thus, procedural timeliness is likely important to employees because it reduces state negative affect while fostering both a social exchange dynamic and a social identity dynamic.

Finally, we took a first step toward exploring the boundary conditions of procedural timeliness effects by examining the moderating effects of decision standardization and outcome favorability. Procedural justice has often been referenced to human resource decisions that are fairly standardized, such as performance evaluations, raise allocations, selection decisions, or organizational changes (Colquitt et al., 2013). Supervisors have varying levels of discretion across different tasks, behaviors, and situations, however (Scott, Colquitt, & Paddock, 2009). Our laboratory study showed that procedural timeliness effects generalized to a task with more discretion. Indeed, in the cases of anger and distress, timeliness effects became even more intense. It may be that "should" questions about appropriateness or perceived inequity are more salient when managers are untimely for reasons within their control.

For its part, outcome favorability stands as the most oft-examined moderator of procedural justice effects (Brockner, 2010). In general, observed interactions indicate that procedures are more impactful when outcomes are unfavorable—presumably because procedures become more closely scrutinized. Our laboratory study showed that procedural timeliness effects largely generalized across high and low outcome favorability levels. The one exception was for anger, where the effects of timeliness were stronger when outcomes were unfavorable. As with the decision standardization results, it seems that supervisors may be held more accountable for hasty or prolonged procedures when negative outcomes make process issues more salient.

Suggestions for Future Research

Our examination of procedural timeliness opens up a number of avenues for future research. There would be value in a nuanced examination of how employees form perceptions of timeliness. How often are such perceptions grounded in when procedures are supposed to end, as opposed to

when they actually do end? When procedures actually do end, do employees tend to learn about the ending from supervisors, or do they learn about the ending from coworkers—perhaps via informal watercooler-style discussions? That latter possibility reveals a key distinction between feedback timeliness and procedural timeliness, given that procedural timeliness can be gauged in the absence of any direct communications with the supervisor.

Speaking of the supervisor, Johnson, Lanaj, and Barnes's (2014) work illustrated that being procedurally just can be draining to supervisors. Their experience sampling study showed that daily instances of seeking voice, suppressing biases, and providing appeals were associated with poorer focus and concentration on the part of supervisors. Is procedural timeliness more taxing or less taxing than those justice-relevant actions? Although scholars have stressed the challenges involved in designing procedures to be timely (Elangovan, 1995; Tyler & Markell, 2010), those challenges may represent "up front" costs. Once procedures have been designed, it may be that the day-to-day administration of those procedures need not be depleting.

There may also be causal connections between procedural justice and procedural timeliness that our studies did not examine. Adhering to rules like voice and correctability could add length to procedures, ensuring that they are not too short but risking that they could be too long. Similarly, focusing on a proper length for procedures could improve accuracy while establishing a certain degree of consistency over time. The justice literature has tended to ignore such connections among multiple procedural qualities, or even multiple justice dimensions. Practically speaking, however, such issues become vital when supervisors attempt to create and enact procedures that are both fair and timely. As with other facets of the supervisory role, there is likely to be a certain "satisficing" that needs to occur on such tasks.

Finally, an increased focus on procedural timeliness could add to the emerging work on the temporal aspects of justice (and related) experiences (Patient, Cojuharenco, & Fortin, 2015). Using the terminology offered in Patient et al.'s (2015) review of temporal issues, timeliness is indicative of

duration—the length between a phenomenon's onset and offset. Duration is capable of impacting other psychological experiences associated with the event. For example, duration may color event perceptions by allowing for particular trajectories or by altering the salience of peak and valley moments. Duration also impacts the frequency of events, which could alter how events are aggregated over time to form more global perceptions. Thus, aside from impacting justice in a causal way, as in the paragraph above, timeliness may shape the cognitive dynamics used to forge justice perceptions.

One avenue for examining the temporal dynamics associated with procedural timeliness is by using theoretical lenses that themselves focus on time. As Patient et al. (2015) note, fairness heuristic theory is one such lens. The theory argues that, as employees gather data to use to navigate the fundamental social dilemma, they latch onto information that is available early in their work relationship and that is easy to interpret. Those pieces of data then have an outsized influence on trust levels, with other issues becoming deemphasized. Such dynamics illustrate the importance of examining procedural timeliness alongside procedural justice among newcomers. On the one hand, because timeliness requires the completion of procedures, data on it will be available later, relative to data on accuracy, voice, bias suppression, and the like. On the other hand, the findings of our field study suggest that timeliness may be easier to interpret than those other justice rules. It may therefore be that "how long" is as important a question as "how fair," even early in organizational relationships.

Limitations

This study has some limitations that should be noted. Although the linkages in Figure 1 were tested with data that were time- or source-separated, our findings could not supply clear evidence of causality. Inferring causality would require true panel data, not merely temporal and source-separation. This is an important issue given that indirect effect predictions assume a certain degree of internal validity (Stone-Romero & Rosopa, 2004). Our inclusion of a laboratory study helps to mitigate some of these concerns, given the use of random assignment when testing procedural timeliness effects on the theory-based mechanisms.

The replication value of our laboratory study was only limited to the front half of Figure 1, however. Given that the bulk of our contribution lays in examining the effects of procedural timeliness on the theory-based mechanisms, we did not include citizenship behavior in the laboratory study. Although we could have included an "intentions to engage in citizenship" measure that would make sense in the context of the vignettes, testing the back half of Figure 1 would have involved same-time, same-source correlational data. Supporting the causal inferences in the second stage of our model would have involved manipulating the levels of the theory-based mechanisms to see whether mean differences emerged for citizenship.

In addition, our field study failed to yield some linkages that would be expected, based on past studies. For example, procedural justice was not a significant predictor of either identification or anxiety, contrary to past findings (Blader & Tyler, 2009; Tyler & Blader, 2000; Tyler & Degoey, 1995). In the case of identification, this is likely a function of controlling for procedural timeliness, as the zero-order correlation between procedural justice and identification was as expected. In the case of anxiety, however, the zero-order correlation was also unusually small. Although the mean of our anxiety scale was quite low, a floor effect did not seem to be occurring given the significant correlation with procedural timeliness. Perhaps procedural justice would have been more strongly related to a more cognitive indicator of uncertainty, such as low predictability or high expectations of change (Colquitt et al., 2012; Desai et al., 2011).

Finally, although our field study controlled for procedural justice when examining the effects of procedural timeliness, it did not control for informational justice. Conceptually, there is a distinction between the time that elapses between the onset of a procedure and when it culminates in a decision, versus the time that elapses between that decision and when feedback and details are provided. The former is reflected in procedural timeliness whereas the latter tends to be reflected in informational justice. Operationally, our third validation study supported the empirical distinction between procedural timeliness and informational justice. All that said, that validation study did show

the two to be correlated, and it may be that supervisors who are timely in one sense tend to be timely in another sense. Future research should therefore control for both procedural and informational justice when examining procedural timeliness effects.

Practical Implications

Our findings point to a number of potential practical implications. For example, past research has illustrated that supervisors can be trained to better adhere to procedural justice rules (Skarlicki & Latham, 1996). It may be that similar kinds of training would be effective for procedural timeliness as well. Such efforts could use needs analysis to identify the units most in need of timeliness improvements, or the kinds of decisions with the most timeliness problems (Skarlicki & Latham, 2005). Training content could then focus on creating an appropriate infrastructure for timely decisions, in terms of proper record keeping and specific timing goals. Our measure of procedural timeliness could then be used to evaluate the training.

Measures of procedural timeliness could also be incorporated into the 360-degree feedback tools that are commonly used in leadership development. One leading tool already assesses procedural justice concepts, including voice, consistency, representativeness, and ethicality (Dalal, Lin, Smith, & Zickar, 2008). If such tools were expanded to include timeliness, supervisors could gain a better sense of where they stand on that metric. Indeed, such feedback would be a useful motivating tool for the training intervention described above. The multiple raters included in 360-degree feedback would be especially useful given the subjectivity involved in gauging procedural timeliness.

Finally, selection and placement systems could be used to facilitate the movement of "timely individuals" into supervisory roles. This could be done by identifying supervisor personality traits that tend to predict procedural timeliness. Past research has revealed weak to moderate correlations between the Big Five dimensions and adherence to procedural justice rules (Mayer, Nishii, Schneider, & Goldstein, 2007). It may be that procedural timeliness is more predictable than procedural justice

given the intuitive connection with some Big Five facets (McCrae & Costa, 2004). For example, supervisors high on the orderliness dimension of conscientiousness may be timely given their organized nature. In contrast, supervisors high on the impulsiveness dimension of neuroticism may make decisions that are too hasty.

Conclusion

Individuals who find themselves in a courtroom know they are entitled to procedures that are just and timely. We explored whether employees in organizations are sensitive to the same issues when decisions are made about pay raises, resource requests, performance evaluations, and the like. Our findings suggest that employees are as sensitive to "how long" as they are to "how fast." Their feelings toward—and cognitions about—their supervisors were predicted by both procedural timeliness and procedural justice, with those reactions having relevance to more bottom-line job behaviors. Moving forward, these results argue for bringing procedural timeliness out of its dormancy and restoring its place in research on procedural effectiveness.

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3514.76.5.820

Table 1

Procedural Timeliness Items, Definitional Correspondence, and Factor Loadings

Scale Item	Procedural Timeliness Definitional Correspondence	Procedural Justice Definitional Correspondence	CFA Factor Loading
1. Are procedures handled in a timely manner?	6.40	2.60	.88
2. Do procedures play out over an acceptable time frame?	6.22	2.62	.85
3. Is the length of procedures appropriate?	5.50	3.36	.76

Note. Definitional correspondence levels are based on a scale of 1 = *Question is an extremely bad match to the definition* to 7 = *Question is an extremely good match to the definition* in the second measurement validation study. CFA factor loadings are from the third measurement validation study.

Table 2

Descriptive Statistics and Correlations for Third Measurement Validation Study

Variable	M	SD	1	2	3	4
1. Procedural Timeliness	3.52	0.86	(.87)			
2. Procedural Justice	3.23	0.86	.62*	(.88)		
3. Informational Justice	3.40	0.89	.66*	.81*	(.89)	
4. Feedback Timeliness	3.45	0.94	.50*	.65*	.69*	(.88)

Note. *n* = 217. Coefficient alphas are listed on the diagonal. * *p* < .05, two-tailed.

Table 3

Descriptive Statistics and Correlations for Study 2

Variable	M	SD	1	2	3	4	5	6	7
1. Procedural Justice	3.41	0.74	(.79)						
2. Procedural Timeliness	3.67	0.94	.58*	(.91)					
3. Identification	3.08	0.88	.25*	.35*	(.87)				
4. Trust	3.44	0.76	.47*	.52*	.63*	(.81)			
5. Anxiety	1.58	0.89	-.09	-.22*	.06	-.18*	(.96)		
6. Anger	1.84	0.94	-.27*	-.34*	-.21*	-.43*	.64*	(.83)	
7. Citizenship Behavior	6.02	1.16	.15*	.22*	.20*	.31*	-.25*	-.31*	(.93)

Note. *n* = 211. Coefficient alphas are listed on the diagonal. * *p* < .05, two-tailed.

Table 4

Indirect Effects of Procedural Justice and Procedural Timeliness on Citizenship Behavior

Path Sequence	Indirect Effect
Procedural Justice → Identification → Citizenship Behavior	.00
Procedural Timeliness → Identification → Citizenship Behavior	-.01
Procedural Justice → Trust → Citizenship Behavior	.19*
Procedural Timeliness → Trust → Citizenship Behavior	.12*
Procedural Justice → Anxiety → Citizenship Behavior	-.01
Procedural Timeliness → Anxiety → Citizenship Behavior	.04*
Procedural Justice → Anger → Citizenship Behavior	.05
Procedural Timeliness → Anger → Citizenship Behavior	.05*

Note. $n = 211$. * $p < .05$, one-tailed.

Table 5a

Manipulation Passages for Decision Standardization

Decision Standardization
Low
It's that time of year when your supervisor considers certain requests for the coming year, and you've asked to attend an out-of-town training seminar. As one input into that decision, you were asked to complete a proposal on what you might gain from the seminar, including a description of its learning objectives.
High
It's that time of year when your supervisor conducts a performance evaluation that determines whether you will receive a raise this year. As one input into that evaluation, you were asked to complete a report that details your performance on several metrics, including achievement of certain goals.

Table 5b
Manipulation Passages for Procedural Timeliness

Procedural Timeliness
Short
As you reflect on the [report/proposal you turned in], you realize that your supervisor tends to make decisions in a pretty fair way, in terms of using relatively accurate information, being pretty consistent, and being typically unbiased. Turning to the pace of the decision-making process, in this particular case, the procedures are playing out over much too short of a time frame. The "wheels of the procedures" are turning unreasonably quickly. The process just seems excessively rushed.
Timely
As you reflect on the [report/proposal you turned in], you realize that your supervisor tends to make decisions in a pretty fair way, in terms of using relatively accurate information, being pretty consistent, and being typically unbiased. Turning to the pace of the decision-making process, in this particular case, the procedures are playing out over an appropriate time frame. The "wheels of the procedures" are turning at an acceptable pace. The process just seems timely.
Long
As you reflect on the [report/proposal you turned in], you realize that your supervisor tends to make decisions in a pretty fair way, in terms of using relatively accurate information, being pretty consistent, and being typically unbiased. Turning to the pace of the decision-making process, in this particular case, the procedures are playing out over much too long of a time frame. The "wheels of the procedures" are turning unreasonably slowly. The process just seems excessively sluggish.

Table 5c
Manipulation Passages for Outcome Favorability

Outcome Favorability
Low
In the midst of that reflection, you just received the official news. And it's bad news. You did not get the [raise/permission to attend the training seminar].
High
In the midst of that reflection, you just received the official news. And it's good news. You got the [raise/permission to attend the training seminar].

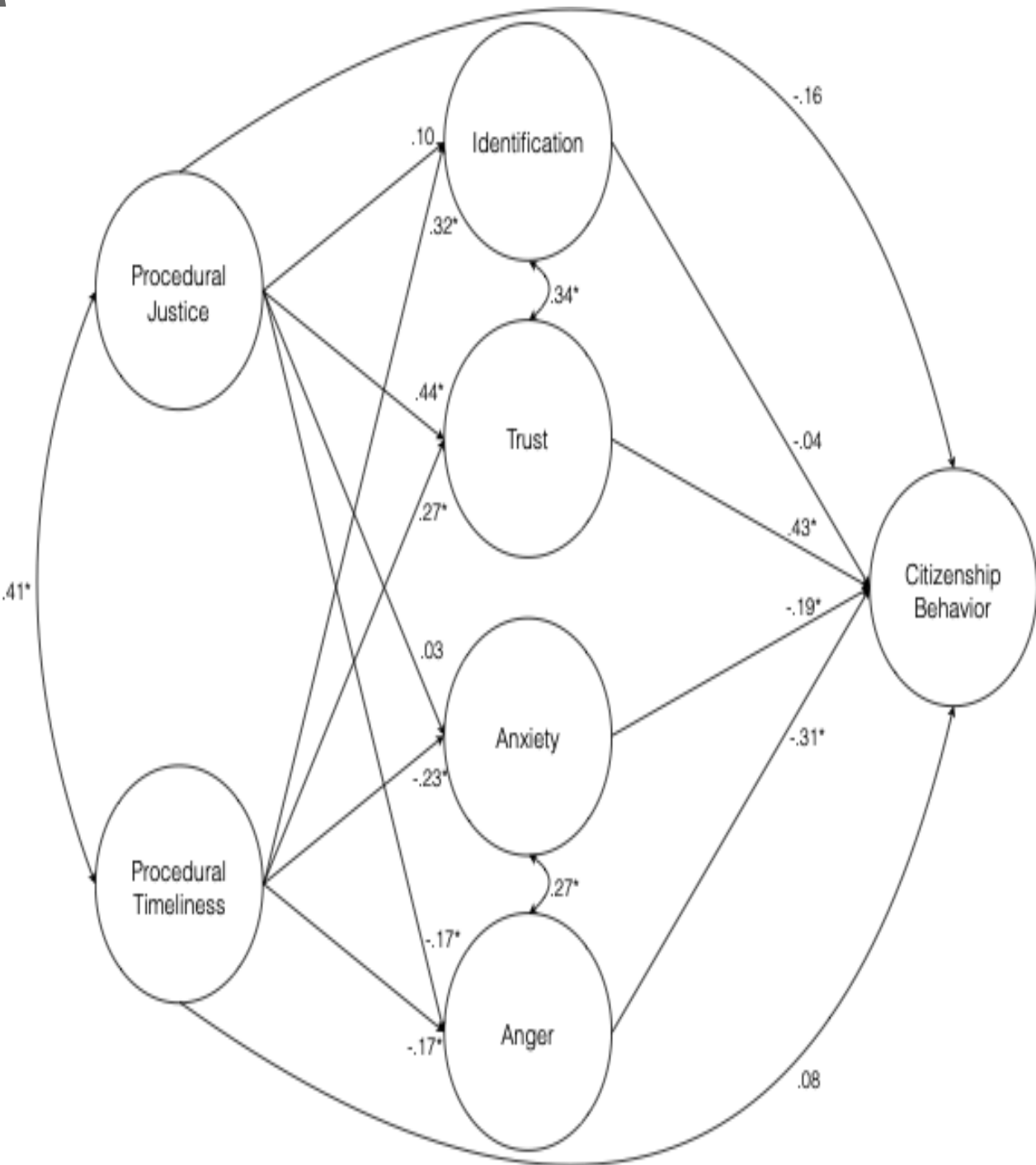Figure 1

Structural Equation Modeling Results for Study 2 Predictions
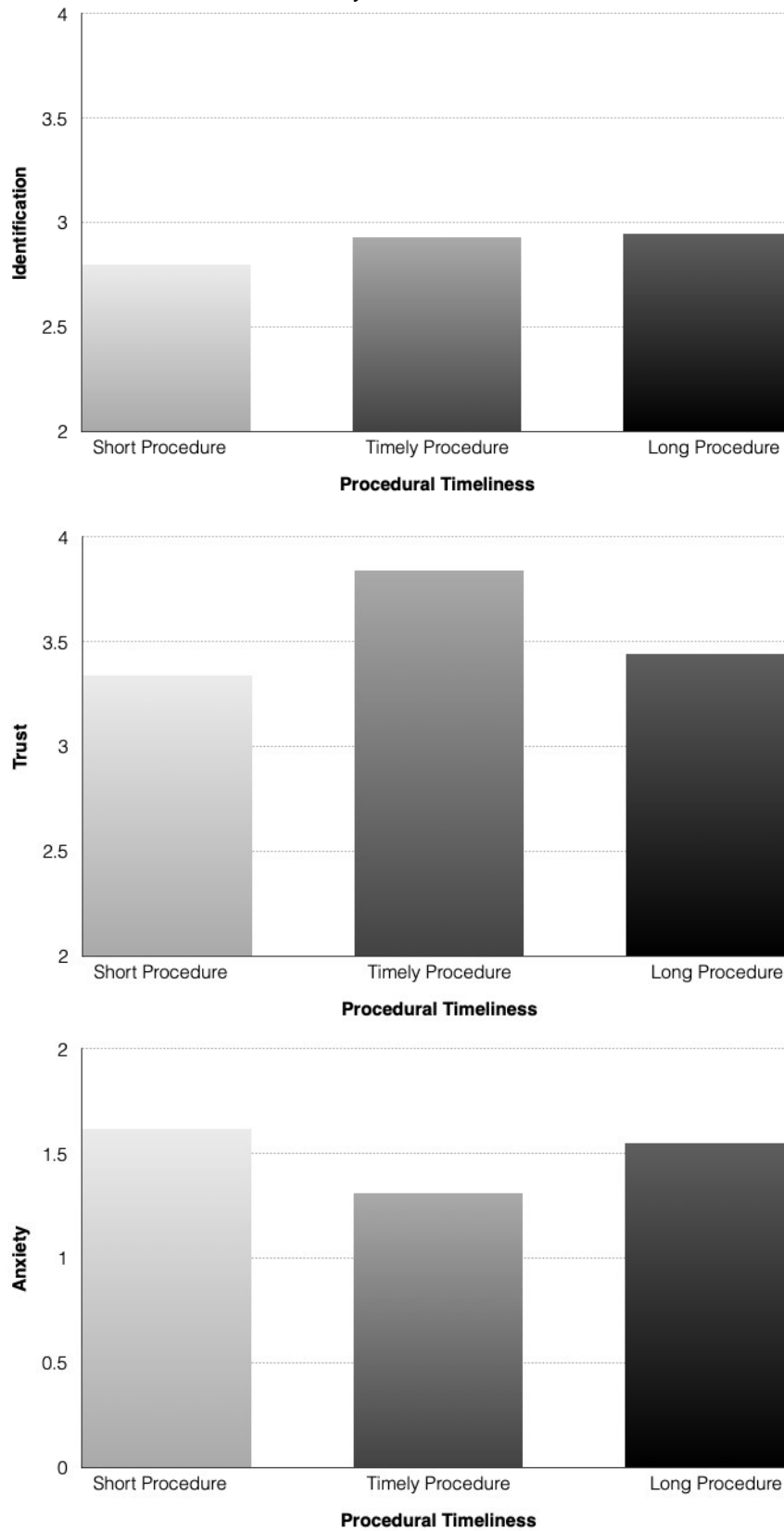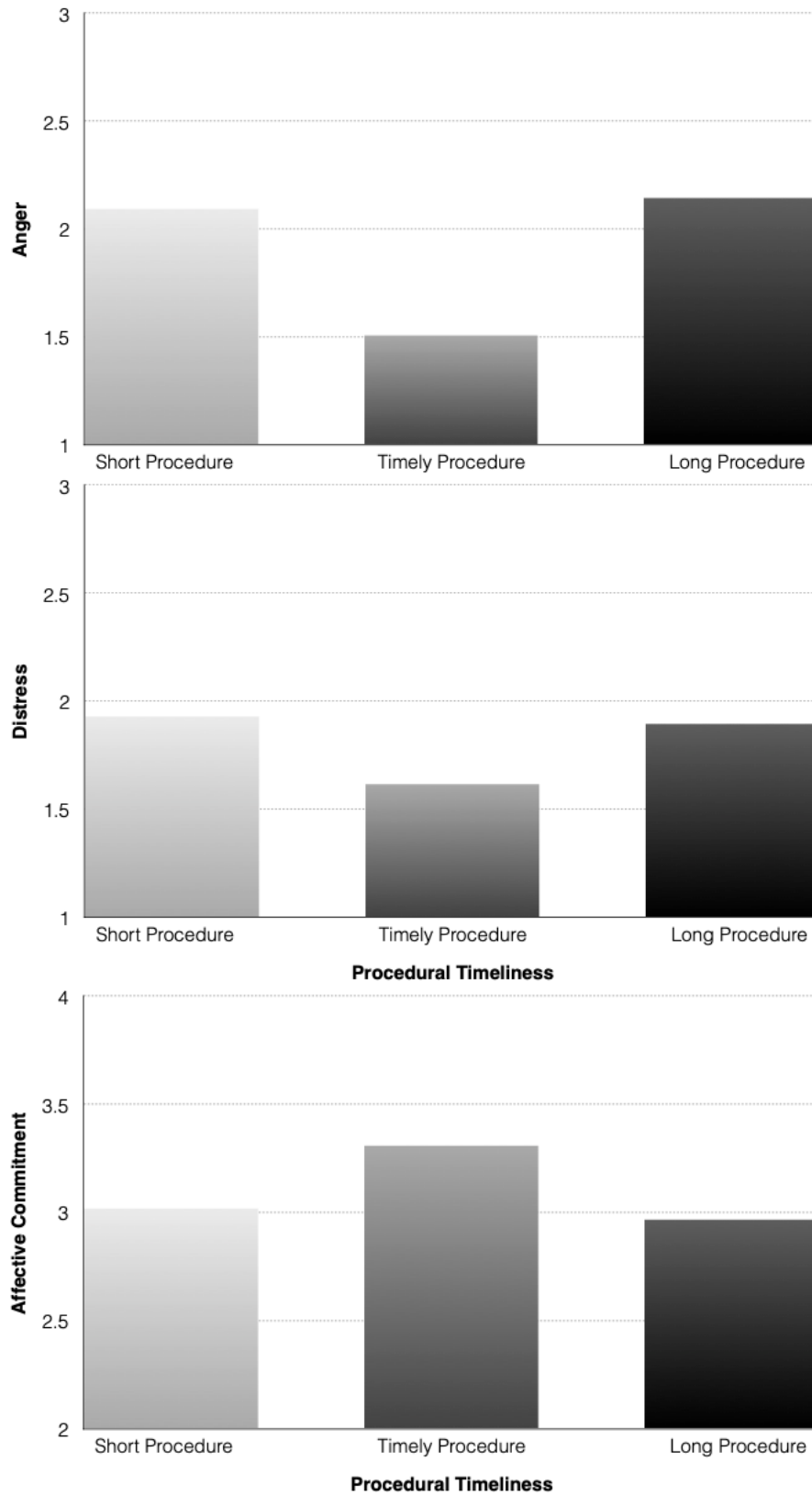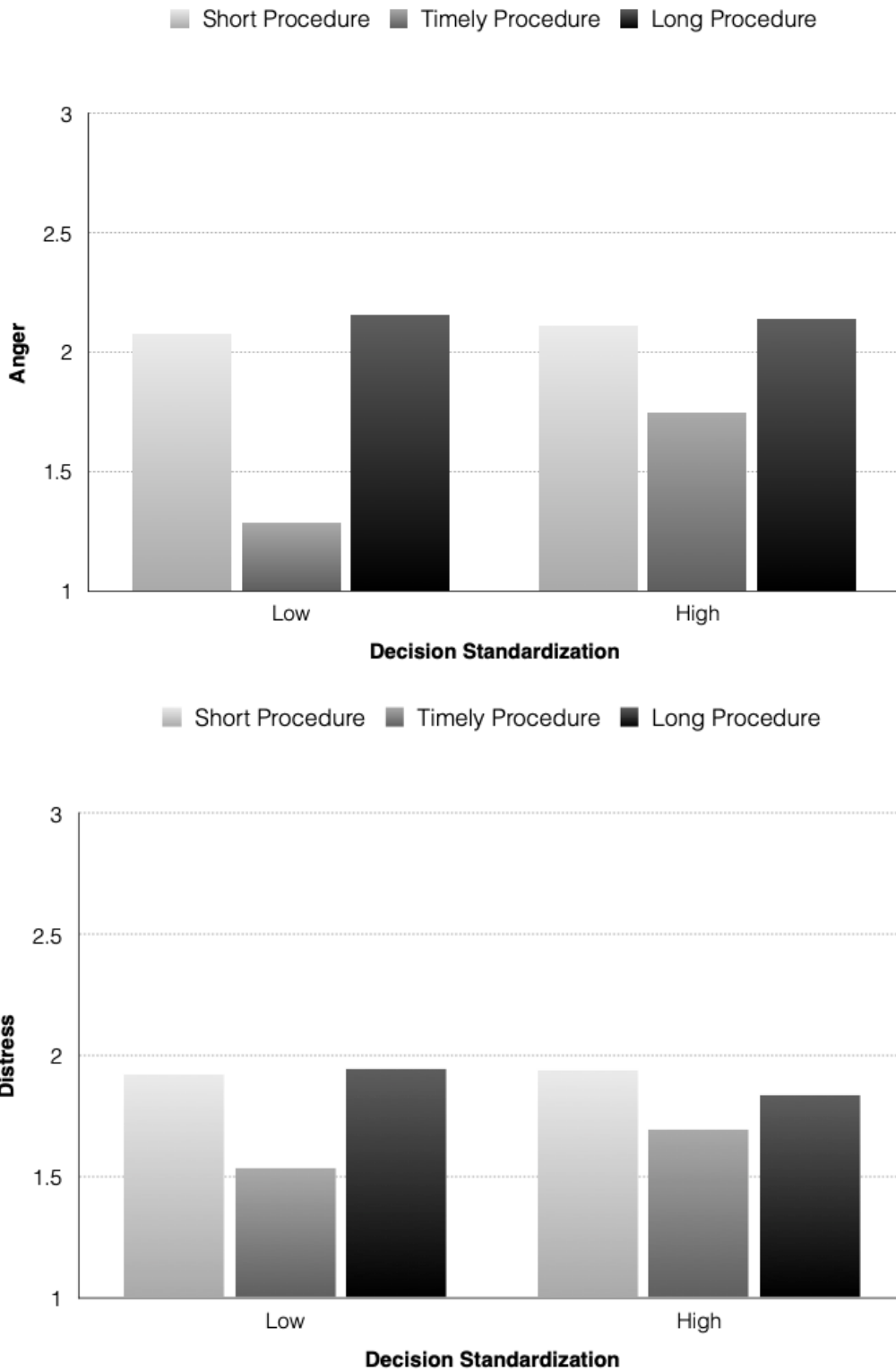
Figure 2

Main Effects of Procedural Timeliness in Study 3

Figure 2, continued
Main Effects of Procedural Timeliness in Study 3

Figure 3

Interactions between Procedural Timeliness and Decision Standardization in Study 3

Figure 4

Interaction between Procedural Timeliness and Outcome Favorability in Study 3