TOWARD A GENERAL MODEL OF FAIRNESS PERCEPTION FORMATION: A
CRITICAL REVIEW AND REVISION OF FAIRNESS THEORY

by

Samuel J Birk

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As members of the Dissertation Committee, we certify that we have read the dissertation prepared by Samuel J Birk, titled Toward A General Model Of Fairness Perception Formation: A Critical Review And Revision Of Fairness Theory and recommend that it be accepted as fulfilling the dissertation requirement for the Degree of Doctor of Philosophy.

________________________________________ Date: (11/10/2014)
Stephen Gilliland

________________________________________ Date: (11/10/2014)
Nathan Podsakoff

________________________________________ Date: (11/10/2014)
Aleksander Ellis

Final approval and acceptance of this dissertation is contingent upon the candidate’s submission of the final copies of the dissertation to the Graduate College.

I hereby certify that I have read this dissertation prepared under my direction and recommend that it be accepted as fulfilling the dissertation requirement.

________________________________________ Date: (11/10/2014)
Dissertation Director: Stephen Gilliland
STATEMENT BY AUTHOR

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SIGNED: Samuel J Birk
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ABSTRACT

Fairness theory represents a widely cited framework for modeling the cognitive processes that underlie the formation of fairness perceptions in the workplace. Nonetheless, imprecise language and scant empirical research limit its ability to further organizational justice research. Therefore, in this dissertation I provide a review and critique of fairness theory suggesting several revisions. I then build upon this revised model to develop a new model of fairness perception formation. The developed model is tested via a laboratory experiment and a field study, both of which provide initial evidence in favor of the proposed model.
INTRODUCTION

Fairness is widely recognized by organizational scholars as an important antecedent of workplace attitudes and behaviors including job satisfaction, organizational commitment, organizational citizenship behaviors, counterproductive work behaviors, absenteeism, theft, and job performance (e.g., Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001; Fassina, Jones, & Uggerslev, 2008; LaHuis, MacLane, & Schlessman, 2007). Thus, investigating the factors that contribute to the formation of fairness perceptions has been a central topic of organizational behavior research for decades. Although several frameworks have surfaced from this research, fairness theory’s (Folger & Cropanzano, 1998, 2001) emphasis on the cognitive processes involved in assessing fair treatment has made it one of the most popular contemporary theories of workplace justice.

Folger and Cropanzano (1998, 2001) state that fairness theory was motivated by the authors’ realization that most theories of organizational justice revolve around issues of accountability. Some theories start “one step back” from accountability (e.g. Folger, 1987; 1993; Lind & Tyler, 1988; Tyler & Lind, 1992) focusing on what influences accountability, whereas others start “one step forward” (e.g. Adams, 1965; Bies & Moag, 1986) focusing on the consequences of holding others accountable. In turn, Folger and Cropanzano focus on articulating the process by which accountability is assessed and how this process relates to fairness. Specifically, fairness theory proposes that three counterfactual, or contrary to the facts, thoughts are essential to assessments of accountability and fairness: Would some imagined alternative state have been better than the experienced state; Could the social entity have acted differently to change the experienced event; and Should the social entity have taken these
alternative actions. At its core, fairness theory offers a model of the mental processes individuals use to determine the fairness of events, supervisors, and organizations.

Over the past fifteen years, fairness theory (Folger & Cropanzano, 1998, 2001) has become one of the most frequently cited models of fairness perception formation in the organizational justice literature. My review revealed 315 articles referencing one or both of the chapters. Fairness theory has also received some empirical support. For example, Gilliland and colleagues (2001) found that explanations aimed at reducing Would, Could, and Should counterfactual thoughts increased reapplication behaviors of rejected applicants. Moreover, Shaw, Wild, & Colquitt (2003) used fairness theory to identify how excuses and justifications targeting different counterfactuals thoughts influenced fairness perceptions. Similarly, Nicklin and Williams (2009) found that Could and Should counterfactuals influenced fairness perceptions, blame ascription, and behavioral intentions to hold others accountable for unfavorable treatment.

Nonetheless, fairness theory suffers from several theoretical issues that limit its potential to represent a quality, contemporary theory of fairness. First, fairness theory does not provide a clear presentation of the relationships between the constructs proposed therein. As Table 1 illustrates quotations taken directly from the seminal chapters (Folger & Cropanzano, 1998, 2001) can be used to support at least three extraordinarily distinct conceptual models. The ambiguous language used to describe these relationships is further hindered by the absence of an explicit illustration of the proposed model. Moreover, the empirical research does not shed much light into the appropriateness of any of the three modes presented in Table 1. My review revealed that there is not a single study that directly tests any of the complete models presented in Table 1. Adding to the confusion, the piecemeal evidence that does exist could be used to support any of
the three models. Therefore, a more comprehensive model of fairness perception formation will need to provide an unambiguous statement and illustration of the relationships between the constructs therein.

Second, the theoretical justification for the Would, Could, Should counterfactual typology proposed by fairness theory is weak and the empirical evidence is weaker. Folger and Cropanzano suggest that the Would, Could, Should typology was developed to map onto a model of accountability proposed by Schlenker and colleagues (Schlenker, 1997; Schlenker, Brit, Pennington, Murphy, & Doherty, 1994). Specifically, Folger and Cropanzano suggest that Would counterfactuals are used to evaluate questions of injury, Could counterfactuals are used to evaluate questions of discretionary conduct, and Should counterfactuals are used to evaluate questions of moral transgressions. According to Folger and Cropanzano (1998, 2001), these evaluations of injury, discretionary conduct, and moral transgressions were critical to Schlenkner’s model of accountability. However, the model proposed by Schlenker (1997) does not discuss injury, discretionary conduct, and moral transgressions. Instead the model proposed by Schlenker suggests that responsibility is determined by evaluating the linkages between “the prescriptions that should be guiding the actor's conduct on the occasion (e.g., moral codes, laws, company policies, job or task objectives), the event that occurred (or is anticipated) that is relevant to the prescriptions (e.g., a task performance), and the characteristics of the actor's identity that describe the actor's relevant roles, qualities, convictions, and aspirations (e.g., manager, parent)” (p. 243). In addition to the poor theoretical justification for this typology, the empirical evidence has been incomplete and in some cases inconsistent with the three models in Table 1 (e.g., Nicklin, 2013; Nicklin & Williams, 2009). Thus, a more appropriate theory of fairness perception formation will need to provide greater justification for the developed model.
Third, in the intervening time since the publication of the seminal fairness theory chapters several developments in the organizational justice literature have been brought to light. Two recent developments are of particular interest to the current article, organizational scholars have recently begun to explicitly distinguish between entity and event fairness constructs (Cropanzano, Byrne, Bobocel, Rupp, 2001). At the time of fairness theory’s publication researchers often confounded these two. Fairness theory was no different. Although fairness theory frequently references a specific instance of unfair treatment (i.e., event fairness), fairness perceptions are often focused on specific individuals (i.e., entity fairness). As will be discussed in more detail later, these distinctions become particularly relevant to understanding the relationship between accountability judgments and fairness perceptions.

Moreover, organizational justice scholars have begun to recognize a difference between unfair and more than fair treatment (Gilliland, 2008). Whereas unfair treatment frequently leads to disruptive workplace behaviors, it is expected that more than fair treatment will exacerbate positive workplace behaviors, even beyond reactions to fair treatment. Although this is a newly emerging research domain, the inherently directional nature of counterfactuals makes this research particularly relevant within the context of fairness theory. As such, a contemporary theory of fairness perception formation will need to address the evaluation of events and entities as unfair, fair, and more than fair.

In order to provide a more comprehensive and contemporary model of the cognitive process related to evaluating workplace fairness, this dissertation will build upon the foundation of fairness theory addressing the limitations stated above. I will begin by restructuring the counterfactual typology proposed by Folger and Cropanzano within a counterfactual typology from the cognitive psychology literature (e.g., Roese, 1997). Next, I will redefine the
accountability construct within the context of event and entity fairness evaluations. Specifically, I will suggest that event fairness perceptions are influenced by the extent to which the affected individual was responsible for the experienced treatment. However, entity fairness perceptions are largely influenced by the extent to which a particular entity is perceived to be responsible for the experienced treatment. After restructuring and redefining the counterfactual and accountability constructs in fairness theory, I will further articulate a new model of fairness perception formation and its associated hypotheses (See Figure 1). Finally, I will perform a laboratory and a field study to test the proposed hypotheses.

**RESTRUCTURING FAIRNESS THEORY’S COUNTERFACTUAL TYPOLOGY**

As mentioned previously, fairness theory’s typology of counterfactual thoughts lacks the theoretical rigor required for a good theory. Specifically, the model of accountability (Schlenker, 1997) Folger and Cropanzano (1998, 2001) claim to use as the foundation for the development of the Would, Could, Should typology is not appropriately represented in fairness theory. Whereas Schlenker’s model suggests that responsibility is determined by evaluations of prescriptions, events, and identity; fairness theory proposes that responsibility is determined by evaluations of injury, discretionary conduct, and moral transgressions. Furthermore, unlike Schlenker’s theory which suggests “assessing responsibility always requires information about the strengths of the connections or linkages between these three elements,” fairness theory sometimes seems to suggest that injury judgments are not directly related to accountability judgments. Specifically, Models 2 and 3 in Table 1 reveal that fairness theory does not consistently propose a relationship between Would counterfactuals and accountability judgments. Thus, the Would, Could, Should typology seems at the very least to lack the theoretical grounding, specificity, and clarity of a well-formed theory.
In addition, Table 1 demonstrates that the seminal fairness theory chapters often make contradictory statements regarding how Would, Could, and Should counterfactuals relate to one another and the other constructs presented in the three conceptual models. As demonstrated by Model 1, fairness theory at times suggests that Would, Could, and Should counterfactuals are all necessary for the assessment of accountability and subsequent fairness perceptions. However, Models 2 and 3 suggest that Could and Should, but not Would, counterfactuals influence accountability judgments; whereas Would but not Could and Should have a direct effect on fairness perceptions. In addition, Model 2 suggests that Could and Should have no effect on fairness perceptions, but instead moderate the influence of fairness perceptions on accountability behaviors via accountability judgments. Thus, the counterfactual typology provided by the current conceptualization of fairness theory also seems to lack the specificity required to answer Whetten’s (1989) How question: “How are they [the proposed constructs] related?” (p. 491).

Moreover, the empirical research investigating the tenets of fairness theory has provided little justification for adopting any of the three models presented in Table 1. My review of articles citing fairness theory revealed only 13 articles with hypotheses related to counterfactual thoughts. Of these 11 conceptually differentiated between Would, Could and/or Should counterfactuals. However, 7 of these studies collapsed across Would, Could, and Should counterfactuals in the statistical analysis making the interpretation of how Would, Could, and Should counterfactuals relate to one another and other constructs difficult. In addition, the 5 studies that separated Would, Could, and Should counterfactuals during analysis simply investigated the bivariate effects of each counterfactual on one or more of the criterion variables (e.g., accountability judgments, fairness perceptions, and/or accountability behaviors). Thus, it is difficult to determine the dominance of any of the three models in Table 1.
Furthermore, two of the studies contradicted all three of the models presented in Table 1. Specifically, Nicklin and Williams (2009) found that Should, but not Could, counterfactuals had a significant effect on fairness perceptions. These authors did not examine Would counterfactuals in their study. However, Nicklin (2013) similarly found that Would and Should, but not Could, counterfactuals demonstrated significant effects on fairness perceptions. Thus, although counterfactual thoughts seem to be related to fairness perceptions, accountability judgments and behaviors, the typology of counterfactual thoughts proposed by fairness theory has received little empirical support.

In summary, the current typology does not seem to meet the theoretical or empirical requirements of a good theory. In order to respond to this issue I will adopt an alternative typology of counterfactual thoughts from the cognitive psychology literature (Epstude & Roese, 2008; Roese, 1997; Roese, 1999; Roese & Morrison, 2009; Roese & Olson, 1997). I suggest that this typology provides a more explicit model of the cognitive mechanisms underlying the formation of fairness perceptions and can absorb Would, Could, and Should counterfactuals within its framework.

**An Alternative Counterfactual Typology**

Roese and Morrison (2009) suggested that the consequences of counterfactual thinking demonstrated by “several hundred studies…may be understood in terms of two basic mechanisms” (p. 18) – contrast and causal counterfactuals. Contrast counterfactual thoughts are used as a ruler against which an experienced event can be judged. The direction and magnitude of discrepancy between the experience and the counterfactual thought influence subsequent valence judgments. Essentially, these *contrast* counterfactuals signal to the individual that s/he might have expected some better or worse alternative to the experienced event and valence
judgments about the event are modified accordingly. For example, victims of rape tend to draw comfort by remarking that they could have been more seriously injured or killed (Burgess & Holmstrom, 1979). Participants requested to think of how a particular recent life experience might have turned out better report greater disappointment than those requested to imagine a worse alternative (Roese, 1994). Cancer patients instructed to think about how their illness could be worse rate their current situation more positively (Taylor, Wood, & Lichtman, 1983). Participants who focused on alternative scenarios in which they were more successful were more dissatisfied with their current state than those focusing on alternative scenarios in which they were less successful (Markman, Gavanski, Sherman & McMullen, 1993). Thus, contrast counterfactuals evaluate one’s current state against an alternative state in order to determine if things are better or worse than what might have been.

Causal counterfactual thoughts, on the other hand, are used as an investigative tool for the identification of who or what is responsible for an experience (e.g., Wells & Gavanski, 1989; Roese & Morrison, 2009). Specifically, the absence of experienced antecedents and/or the presence of imagined alternative antecedents are used to judge why the experience occurred. These causal counterfactual evaluations ask questions like, “Would the event Y have occurred if the candidate X had not?” (McGill & Klein, 1993, p. 897). According to Schaffer (2005), causal counterfactuals resolve the discrepancies revealed via contrast counterfactuals between the experienced event (e) and imagined event (e*), by comparing the causes of the experienced event (c) with the absence of those causes or alternative causes (c*). For example, if a salient contrast counterfactual created a comparison between the experienced event (e) – receiving a little voice in the decisions made by an organization – against an imagined alternative event (e*) – receiving a lot of voice in the decision making process – one might examine how the absence of
experienced causes ($c^*$) might have altered the experienced event ($e$) to be more like the imagined alternative ($e^*$). Essentially, causal counterfactuals signal to an individual, which of several possible antecedents caused the experience rather than the imagined alternative to occur.

According to Roese and colleagues (Epstude & Roese, 2008; Roese, 1997; Roese, 1999; Roese & Morrison, 2009; Roese & Olson, 1997) these causal counterfactuals are responsible for the relationship between counterfactual thoughts and blame ascription identified by previous research (c.f., Kahneman & Miller, 1986). For example, Macrae (1992) found that the blame ascription was influenced by the generation of causal counterfactuals. Specifically, thinking about why the victim might have been responsible for being victimized altered blame attributions from the victimizer to the victim. A growing body of research has demonstrated similar effects of causal counterfactuals on accountability judgments (e.g., Alicke, Buckingham, Zell, & Davis, 2008; Davis & Lehman, 1995; Mandel & Lehman, 1996; Nario & Branscombe, 1995).

Thus, although both contrast and causal counterfactuals compare real experiences against imagined alternatives, they differ in their structure and consequences. Specifically, contrast counterfactuals compare the experience as an outcome against alternative imagined outcomes to determine how favorable/unfavorable, good/bad, right/wrong, etc. the experience was. On the other hand, causal counterfactuals compare the real antecedents of the experience against the absence of those antecedents and/or the presence of imagined antecedents to determine who or what is accountable for the experience.

**Integrating the Contrast/Causal Typology within Fairness Theory**

In addition to providing a theoretically grounded and empirically validated typology of counterfactual thoughts, the contrast/causal typology can also subsume the Would, Could, Should typology. Specifically, Would and Should counterfactuals are particular instances of
contrast counterfactuals, whereas the Could counterfactual is a particular instance of causal counterfactuals. According to Folger and Cropanzano (2001), Would judgments assess “states”, “injury” (p.6), “harm” (p.6), “negativity” (p.10), and “goodness-badness (value judgments)” (p.45) via comparisons of “what one’s state of well-being is” against “what one’s state of well-being would have been.” Should judgments assess “legitimacy” (p.44), “moral conduct” (p.13), “good and bad” (p.20), “right and wrong” (p.20) via comparisons of “what the social entity did” against “what the social entity should have done.” In other words, both Would and Should counterfactuals –like contrast counterfactuals - are used to determine whether the experienced event might have been better or worse based on the direction and magnitude of the discrepancy between reality and the counterfactual.

Could counterfactuals, on the other hand, assess whether experienced treatment is attributable to an external social entity’s discretionary conduct. Folger and Cropanzano (1998, 2001) suggest that these judgments rely on comparisons between the social entity’s actions and actions the social entity could have taken. Thus, Could counterfactuals like causal counterfactuals assess why the experience occurred by comparing the experienced antecedents (the social entity’s actions) against the counterfactual absence of those antecedents (if the social entity had not taken the experienced actions) and/or the presence of counterfactual antecedents (if the social entity had taken alternative actions).

In summary, the contrast/causal typology seems to provide a more theoretically and empirically rigorous framework that can subsume the Would, Could, Should typology proposed by Folger and Cropanzano (1998, 2001). Moreover, as will be discussed in more detail below, the nature of contrast and causal counterfactuals suggest explicit hypotheses regarding the relationships between counterfactual thoughts, accountability judgments, and fairness.
perceptions. However, before providing a more detailed description of the proposed model, in the next section I will further critique fairness theory’s accountability construct. I will begin by suggesting that the fairness construct in fairness theory is tautologically, rather than theoretically, associated with accountability judgments. Furthermore, I will critique fairness theory’s ambiguous articulation of the relationship between accountability judgments and fairness perceptions. I will then attempt to provide an alternative model that differentiates between the accountability judgments used to evaluate event versus entity fairness perceptions.

**REFOCUSING FAIRNESS THEORY’S ACCOUNTABILITY JUDGMENT CONSTRUCT**

In addition to the problems associated with the Would, Could, Should typology, fairness theory also suffers from an ambiguous articulation of the accountability judgment construct and its relation to fairness perceptions. These problems stem in part from tautologically relating accountability to fairness. Folger and Cropanzano (1998) state, “the theory aims at explaining perceptions of social fairness” (p. 175; italics added). However, fairness theory recognizes that instances of both personal and social fairness exist. Folger and Cropanzano suggest that personal fairness, or fairness-as-deservingness, can result from any instance of an undeserved, or unjustified event caused by impersonal forces. For example, when people say, “It’s unfair that the drought ruined my crops” they are referencing an instance of personal unfairness. On the other hand, social unfairness, which is the subject of fairness theory, is defined as “unwarranted adversity attributable to another social agent” (p. 177). In other words, social fairness is defined as a fairness event in which the individual blames a social entity. In turn, statements central to fairness theory such as, “If no one is to blame, there is no social injustice” and “The theory presumes that the central topic of social justice is the assignment of blame” (Folger &
Cropanzano, 2001, p. 1) are tautological because social justice is defined as fairness attributable to a social entity.

Beyond the issue of tautologically associating accountability and fairness, the specific form of the relationship is also ambiguous. As Table 1 illustrates quotations from the seminal chapters could be used to support three contradictory relationships. Specifically, Model 1 suggests that accountability judgments are the proximal antecedent of fairness perceptions; Model 2 suggests that accountability judgments moderate the relationship between Would counterfactuals and a fairness perceptions; and Model 3 suggests that accountability judgments are unrelated to fairness perceptions, but instead moderate the relationship between fairness perceptions and accountability behaviors. In addition, few empirical studies citing fairness theory have directly tested any of the possible relationships between accountability judgments and fairness perceptions. The few that have provided an analysis of the relationship between fairness and blame have provided evidence supporting both Model 1 (Nicklin & Williams, 2009) and Model 2 (Horvath & Andrews, 2007). Thus, despite evidence suggesting that accountability judgments are related to fairness perceptions, fairness theory again seems to lack an explicit answer to Whetten’s (1989) question: “How are these [constructs] related?” (p.491).

Therefore, in the next section I will review an alternative model presented by the entitlement perspective (e.g., Adams, 1965, Ellard & Skarlicki, 2002; Feather, 1993; Heuer, Blumenthal, Douglas, & Weinblatt, 1999). I then integrate the perspective proposed by fairness theory and the entitlement perspective suggesting that each model is more appropriate for describing entity and event fairness perceptions, respectively.
The Entitlement Perspective

Several researchers have suggested that fairness is largely determined by the extent to which the individual deserved, or was somehow responsible for the experienced treatment (e.g., Ellard & Skarlicki, 2002; Feather, 1993; Heuer, et. al., 1999). Specifically, if external social entities, or impersonal forces (e.g., the weather, the economy, or the fates) were responsible for the justice violation, the experienced treatment is considered unfair. However, if the individual deserved the experienced treatment due to actions or characteristics that make him/her responsible for the treatment, the event is considered fair. This perspective differs from fairness theory’s model by emphasizing the responsibility of the person who experienced the treatment rather than an external social entity. As admitted by Folger and Cropanzano (1998, 2001), fairness theory focuses on *social fairness*, which only evaluates the accountability of a single external entity and thus does not consider how actions and characteristics of the affected individual, several external social entities or impersonal forces might influence fairness perceptions. However, by focusing accountability judgments on the recipient of the treatment, the entitlement perspective can account for fairness perceptions that result from personal, external, impersonal, and multi-source attributions.

Linking Accountability to Event and Entity Fairness

I will argue that both fairness theory’s emphasis on the accountability of a single external entity, and the entitlement perspective’s emphasis on the accountability of the recipient are important for different types of fairness perceptions. Specifically, whereas the entitlement perspective’s emphasis on the recipient is proposed to influence event fairness; fairness theory’s emphasis on a particular external social entity is proposed to influence entity fairness.
Cropanzano et al. (2001) were the first to explicitly distinguish between event and entity fairness perceptions. These authors suggested that event fairness perceptions relate to a single experience at a specific time, whereas entity fairness perceptions relate to overall judgments of an entity’s fairness across times and contexts. In support of this conceptual differentiation, several researchers have shown that event and entity fairness perceptions are related to different constructs and often interact with one another when evaluating subsequent attitudes and behaviors directed toward particular entities (e.g., Choi, 2008; Choi & Chen, 2004; Hollensbe, Khazanchi, & Masterson, 2010).

Although both entity and event fairness are important constructs organizational behavior research, each has different consequences and each likely has different antecedents. For instance, event fairness perceptions would not seem to necessitate considerations of a particular social entities responsibility. As mentioned above, an unexpected drought that kills a farmer’s crops can evoke perceptions of injustice. In this case, the event (i.e., the drought or the destruction of crops) is unfair even though there is no external social entity to blame. Similarly, event fairness can often be the consequence of several factors working together. Even though any specific entity is not perceived to be particularly responsible, the event is still considered to be unfair. For example, one might not receive a raise because the economy was particularly bad, and the new boss did not capture the one project that would have provided the income necessary to grant raises. In this case, one might presume that a better economy would have provided more opportunities or that the old boss could have done a better job. But regardless of how much blame you put on a particular entity, the fairness of the event (i.e., not receiving a raise) is likely going to be the same. Thus, event fairness seems to be more amenable to the entitlement’s emphasis on the accountability of the recipient. That is, if the recipient was in some way
responsible for (i.e., deserved) the treatment s/he received, the event will be considered fair. However, if the recipient was not responsible for the treatment s/he received regardless of whether an external social entity, several external entities, or impersonal forces were responsible, the event will be considered less fair.

Entity fairness perceptions, on the other hand, seem to inherently require evaluations of a particular entity’s responsibility for an event, or several events. As an oversimplified example, imagine that three individuals vote on whether or not employees will receive a Holiday bonus. One of the individuals, Bob votes for, and the other two individuals Chris and Tom vote against. The employees have worked hard all year and perceive the event (i.e., not receiving a Holiday bonus) to be unfair. However, although all three individuals had some say in the final decision, it is likely that Chris and Tom, but not Bob, will be considered responsible. Thus, even though all three entities are responsible for the outcome, Chris and Tom will likely be perceived as unfair, but Bob will not. Therefore, fairness theory’s emphasis on the accountability of a particular external social entity seems consistent with evaluating entity fairness. Specifically, the influence of event fairness on entity fairness perceptions is moderated by the extent to which the particular entity is perceived to be responsible for the event.

**PROPOSED MODEL**

Thus far, I have reviewed and critiqued fairness theory (Folger & Cropanzano, 1998, 2001) to provide a theoretically grounded framework of fairness perception formation. I have suggested that the contrast/causal counterfactual typology provided by Roese and (Epstude & Roese, 2008; Roese, 1997; Roese, 1999; Roese & Morrison, 2009; Roese & Olson, 1997) colleagues provides a theoretically and empirically justified typology that can encompass the less well supported Could, Would, Should typology provided by fairness theory. In addition, I have
suggested that the accountability of an external social entity, which is the focus of fairness theory, is associated with entity fairness perceptions; whereas the accountability of the recipient of treatment, which is the focus of the entitlement perspective, is associated with event fairness perceptions. In the next section I further integrate these revisions to fairness theory in order to describe a new model of the cognitive processes underlying event and entity fairness perceptions.

**Event Fairness Perceptions**

*Is a contrast counterfactual salient?* Several organizational justice researchers have suggested that fairness is the norm, and as such people often do not evaluate fairness until they consider information suggesting that something abnormal has occurred (e.g. Bies, 2001; Folger & Cropanzano, 1998; Gilliland, 2008). For example, Cropanzano, Stein, and Nadisic (2011) suggested, “Justice may be seen as the normal state that people do not notice until something goes wrong, just as a fish notices that it needs water only when it is taken out of the sea.” (p. 220). Similarly, Crosby (1976) proposed that, “people feel unjustly treated or inadequately compensated when they compare themselves to some standard of reference.” Likewise, Organ (1990) noted “…just as we have little reason to recognize comfort except when struck with the reality of discomfort, we have little reason to think much about fairness until demonstrable unfairness obtains.” (pp. 67-68). Finally, Rupp and Spencer (2006) speculated that “In the absence of injustice, fairness becomes a camouflaged phenomenon...Fairness often implies simple adherence to expected norms, which observers tend to take for granted and hence fail to notice...Thus, a study in justice must use injustice as the dominant theme because it is more salient to those who experience it or observe it.” (p. 972).

If fairness is the norm, and evaluations of fairness require demonstrations of the abnormal, the questions facing organizational justice researchers are: “What is the norm?” and perhaps
more importantly “How do individuals determine what is abnormal?” Generally, organizational justice researchers have approached these question from one of two perspectives. The predominant organizational justice framework presumes that justice norms are socially defined. For example, in the highly cited meta-analysis reviewing the state of organization justice research at the beginning of the millennium Colquitt et al. (2001) state, “In research in the organizational sciences, justice is considered to be socially constructed. That is, an act is defined as just if most individuals perceive it to be so on the basis of empirical research” (p.425). Consistent with this perspective, a large body of organizational justice research has concentrated on identifying the socially constructed justice rules that empirically predict fairness perceptions (See Colquitt, Greenberg, & Zapata-Phelan, 2005 for a review of this literature). Despite the popularity of this socially constructed perspective, recent research (e.g. Ambrose & Schminke, 2009; Holtz & Harold, 2009; Jones & Martens, 2009) has demonstrated that the distributive, procedural, and interactional justice norms identified by the socially constructed perspective do not fully account for variance in explicit measures of global, or overall, fairness perceptions (e.g. "Overall, the treatment I receive around here is fair"). This has led organizational justice researchers to revisit alternative perspectives suggesting that what represents normative treatment is dependent on characteristics of the person and situation.

Research consistent with this idiosyncratic perspective suggests that personality has a strong influence on the norms used to assess fairness. For example, Anderson and Patterson (2008) found that different personality types measured using the Social Value Orientation scale are associated with the use of equality (i.e., cooperative personalities) versus self-interest (i.e., individualistic personalities) norms when evaluating distributive fairness. Furthermore, Cornelis, De Cremer, and Van Hiel (2011) found that the opportunity to speak up has a stronger influence
on procedural fairness perceptions for individuals high, rather than low, in social dominance orientation. In addition to the variance in justice norms across personalities, research has also demonstrated that the influence of justice norms on explicit measurements of fairness perceptions differ across times and samples. For example, Ambrose and Schminke (2009) found that justice rules explained nearly 30% more variance in overall fairness perceptions in the sample used in Study 2 compared to the sample used in Study 1. Moreover, distributive justice had a significant effect on overall fairness in Study 1 (r = .25), but the effect was non-significant in Study 2 (r = .08). Similarly, the relationship between interactional justice and overall justice was found to vary significantly over time. Further, Holtz and Harold (2009) also found variation in the relationship between justice rule violations and overall fairness perceptions over time. Thus, although the rules identified by the socially constructed perspective might provide the most commonly used norms against which people evaluate fairness; people also seem to use idiosyncratic norms that are influenced by personal values (e.g., Anderson & Patterson, 2008) and contextual cues (e.g., Ambrose & Schminke, 2009).

Therefore, I suggest that there is a integrative approach to describing how individuals evaluate “what the norm is” that can encapsulate both the socially constructed and idiosyncratic perspectives. Specifically, “Is a contrast counterfactual salient?” As discussed above, contrast counterfactuals present evidence that something else might have occurred. In other words, thinking about an alternative to the experienced situation suggests that something at least could and potentially should have been expected. As several organizational justice researchers have suggested, counterfactual thoughts are determined by cultural, situational, and personal values (e.g., Folger & Cropanzano, 1998, 2001; Gilliland, et al., 2001; Nicklin, Greenbaum, McNall, Folger, & Williams, 2011; Nicklin & Williams, 2009). Thus, salient contrast counterfactuals
might be used to compare experienced treatment against socially constructed justice norms (e.g. Colquitt, et al. 2001), idiosyncratic justice norms (e.g., Anderson & Patterson, 2008), or any other normative expectation for how one could or should have been treated. In fact it is very hard to imagine a circumstance in which one might judge that something abnormal has occurred without first comparing one’s experience against a norm. By definition the norm, in this case, would represent a salient contrast counterfactual. Therefore, if fairness assessments require a realization that something abnormal has occurred, a contrast counterfactual must be salient.

Hypothesis 1: Fairness assessments are prompted by salient contrast counterfactuals.

What is the direction and magnitude of the salient contrast counterfactual? In addition to indicating that an alternative might have been expected, contrast counterfactuals indicate the direction of the discrepancy between the experienced treatment and the imagined alternative. Folger and Cropanzano (1998, 2001) suggest that the fairness of an experience is often ambiguous. In turn, counterfactuals are presumed to act as a ruler against which the valence of an experience can be judged. The direction of contrast counterfactuals (i.e. upward or downward) and magnitude (the perceived difference between the experienced and imagined alternative) can be used determine the favorability of the experienced norm violation. This second function of contrast counterfactuals suggests an important departure from traditional conceptualizations of fairness perceptions.

The vast majority of the research on organizational justice has focused on a scale of fairness that ranges from unfair to fair. This perspective is easily accounted for by the consideration of upward contrast counterfactuals. An employee who receives a $500 bonus is likely to perceive the event as unfair when a salient upward contrast counterfactual suggests that the employee might have expected a $1000 raise. However, a downward contrast counterfactual
in which the employee receives no raise might be salient. If fair is the normal, then like upward counterfactuals, salient, downward counterfactuals indicate that the experience might not be fair. However, due to the negative connotations associated with the term unfair, it is unlikely that most people would perceive the experience as unfair relative to the downward contrast counterfactual. Instead, individuals might perceive the bonus as “more than fair”.

To my knowledge, the only research that explicitly proposes a more than fair component of fairness perceptions is Gilliland’s (2008) tails of justice model. However, preliminary support in favor of more than fair as an important component of justice can be gleaned from a study conducted by Greenberg (1988). Greenberg tested and found support for Adams’ (1965) proposition that overpayment inequity might increase positive behaviors. Specifically, workers who perceived that they were being overpaid performed at higher levels. Thus, although the more than fair component of fairness perceptions has received little attention in the extant organizational justice literature, both conceptual and empirical research point to its potential influence on organizationally relevant criteria.

Hypothesis 2: Salient upward contrast counterfactuals will cause an event to be perceived as more unfair than the absence of contrast counterfactuals (2a); salient downward contrast counterfactuals will cause an event to be perceived as more more-than-fair than the absence of contrast counterfactuals (2b).

Was the experienced treatment deserved? As noted by several organizational justice scholars, justice norm violations do not fully account for fairness perceptions (e.g. Ambrose & Schminke, 2009; Jones & Martens, 2009). Ellard and Skarlicki (2002) suggest that fairness evaluations also consider the extent to which the violation was deserved. For example, rude treatment (interactional justice), biased procedures (procedural justice), and inequitable
distributions (distributive justice) are only unfair to the extent that the individual did not deserve to experience the violations. As an example, imagine that an employee is overtly rude to his supervisor. If the supervisor then treats the employee impolitely, the treatment does not seem unfair because it is not undeserved. The employee was responsible for the treatment s/he is now receiving. Heuer and colleagues (1999) provide empirical support for this perspective demonstrating that the influence of respectful treatment on fairness perceptions depends on the degree to which the individual perceives that they deserved to be treated with respect. Furthermore, research has consistently demonstrated that deservingness strongly predicts fairness perceptions (Feather, 1999, 2008).

This evidence suggests that in addition to evaluating the direction and magnitude of the discrepancy between experienced treatment and a justice norm, fairness perceptions also depend on the extent to which the recipient is responsible for the violation. As discussed previously, salient causal counterfactuals provide information about causality via evaluations of how the experience might have been changed. Therefore, I suggest that when causal counterfactuals identify the focal individual as responsible the event it is viewed as deserved and therefore fairer. However, if the causal counterfactuals signal that other forces are responsible (e.g. the weather, the established procedures that the focal individual did not influence, the actions of a social entity), the event is considered undeserved and therefore less fair (i.e. more consistent with the initial fairness assessment).

Hypothesis 3: The relationships between perceived upward (3a) and downward (3b) contrast counterfactuals and perceived fairness proposed in Hypothesis 2 will be attenuated when salient causal counterfactuals indicating individual responsibility are present.
Entity Fairness Perceptions

As mentioned earlier, entity fairness represents a general evaluation of a particular entity’s fairness over time. I suggested earlier that unlike event fairness, which is influenced by the extent to which the affected party is responsible for received treatment; entity fairness is inherently influenced by the extent to which a particular entity is responsible for an event, or several events. As noted by Choi (2008) “employees experiencing a management practice assess not only the fairness of that practice, but also the fairness of the social entity that is perceived to be accountable for the practice” (p.514). Moreover, I propose that the responsibility of the particular social entity is determined by examining causal counterfactuals related to the absence of actions taken by the particular entity, or the presence of alternative actions the particular entity might have taken to remove the discrepancy between the experienced treatment and the salient contrast counterfactual. However, entity fairness is widely considered to be a stable perception that relies on several past experiences with the entity (e.g., Choi, 2008; Cropanzano et al., 2001). As suggested by Rupp (2011), once an accountable, social entity is identified as responsible for a fairness event, the event is encoded into memory with earlier events impacting the processing of subsequent events. Over time, fairness events attributed to a specific social entity are aggregated to form entity fairness perceptions. Therefore, any consideration of the evaluation of entity fairness perceptions must control for prior entity fairness perceptions when prior entity fairness perceptions exist.

Hypothesis 4: Controlling for previous entity fairness perceptions, event fairness perceptions will influence entity fairness perceptions to the extent that causal counterfactuals implicate the particular entity as responsible for the experienced treatment.
**Fairness Perceptions and Accountability Behaviors**

Although several researchers have suggested that fairness is an end in itself (e.g., Cropanzano, et al., 2001; Folger, 2001), fairness is relevant to organizational behavior research because fairness perceptions influence behaviors that help and impede organizational objectives. Thus, a complete model of fairness perception formation should also account for the influence of fairness perceptions on these workplace behaviors. Fairness theory suggests that the fairness of experienced treatment motivates individuals to hold the responsible party accountable. In other words, unfair treatment decreases OCBs because the individual is motivated to seek retribution against the responsible party; whereas fair treatment increases OCBs because the individual is motivated to reward the responsible party.

Nonetheless, the fairness of any specific event is unlikely to have a significant influence on accountability behaviors for at least two reasons. First, the current model asserts that impersonal forces, such as the weather or the economy, can influence event fairness perceptions. When impersonal forces are responsible for unfair treatment, event fairness perceptions should not influence accountability behaviors because there is no one to hold accountable. Second, even when unfair treatment is caused by an external social entity, a specific instance of unfair treatment might not be sufficient to motivate the individual to stop engaging in OCBs that help the responsible party. People in workplace settings are constantly interacting with external social entities (e.g., coworkers, supervisors, subordinates, and the organization) and research suggests that people acquire entity fairness perceptions that rely on an aggregation of previous experiences with the social entity (Rupp, 2011; Rupp & Paddock, 2010). As proposed and empirically demonstrated by Choi (2008), managers who are generally fair are less likely to be held accountable (i.e., employees do not reduce OCBs) for a particular instance of unfair
treatment. Choi argues that this occurs because people give these fair managers the benefit of the doubt. Thus, people seem to rely more on entity fairness perceptions when engaging in behaviors that help or hurt a social entity. In other words, the influence of event fairness perceptions on OCBs seems to occur through entity fairness perceptions.

Hypothesis 5: Entity fairness perceptions will be directly related to OCBs.

Hypothesis 6: The influence of event fairness perceptions on OCBs is mediated by entity fairness perceptions, while controlling for previous entity fairness perceptions.

**CURRENT RESEARCH**

This dissertation has attempted to bring clarity to several discrepancies in fairness theory as well as incorporate several distinct conceptual models within a single framework. I have attempted to provide theoretical justification for the developed model via conceptual arguments and empirical research from the extant literature where possible. However, there are several aspects that have not previously been tested. Specifically, (1) the influence of salient contrast and causal counterfactuals on fairness perceptions; (2) the potential for experienced treatment to be considered more than fair in addition to fair and unfair; (3) the moderating effect of accountability judgments on the relationship between event fairness and entity fairness; (4) the influence of internal versus external accountability judgments on event and entity fairness perceptions; and (5) the influence of event fairness on accountability behaviors via entity fairness perceptions. In order to provide further support for the developed model, I conducted two studies to address the proposed hypotheses. Study 1 utilizes an experimental design to examine several of the causal pathways related to the formation of event fairness perceptions. Study 2 employs a field study to assess the frequency of fairness assessments and evaluate many of the proposed hypotheses in a less structured more ecologically valid context.
STUDY 1

Study 1 was intended to determine the causal influence of upward and downward contrast counterfactuals and causal counterfactuals on perceptions that events are unfair, fair, or more than fair. Specifically, Study 1 investigates (1) Hypothesis 1, which predicts that the salience of counterfactual thoughts will lead to perceptions of event fairness; (2) Hypothesis 2, which predicts that salient upward contrast counterfactuals will cause events to be perceived as unfair; whereas salient downward causal counterfactuals will cause events to be perceived as fair; and (3) Hypothesis 3, which predicts that the influence of contrast counterfactuals on fairness perceptions will be moderated by the salience of causal counterfactuals.

Design and Procedures

495 currently employed participants (51% males; 12.5 years of work experience) recruited from mTurk were randomly assigned to one of six experimental conditions using a 2 (Contrast: Salient vs. Not Salient) X 2 (Direction: Upward Contrast Counterfactual vs. Downward Contrast Counterfactual) X 2 (Causal: Salient vs. Not Salient) design (See Table 2). The study employed workplace scenarios concerning employee voice opportunities to explicitly provide/not provide participants with contrast can causal counterfactuals. The frequency of voice opportunities was chosen because voice is commonly researched in the organizational justice literature. See below for a description of the scenarios read in each condition. After reading the scenario participants responded to a survey that assessed event fairness perceptions.

Scenarios

All participants read the following introduction:

Imagine that you are an employee of Marvelous Systems Inc. The HR policy states that all supervisors should schedule appointments that give employees the opportunity to
bring up concerns they have about the company and ways that the company can improve performance.

The rest of the scenario varied slightly depending on the condition. The text related to each condition is presented below. The manipulation of contrast counterfactual salience was accomplished by manipulating whether the frequency of actual voice opportunities was consistent (Contrast Not Salient), or inconsistent (Contrast Salient) with the frequency of voice opportunities in other departments. The manipulation of contrast counterfactual direction was accomplished by stating that the frequency of actual voice opportunities was more frequent (Downward Contrast) or less frequent (Upward Contrast) than other departments. Upward contrast counterfactual scenarios indicated that voice opportunities were scheduled once a year whereas the other departments provided voice opportunities once a week. Downward contrast counterfactuals indicated that voice opportunities occurred once a week, whereas other departments provided voice opportunities once a year. These frequencies were chosen based on feedback from a pretest that indicated once a week was the most preferred frequency and once a year was the least preferred frequency out of an array of frequencies that included every day, once a month, bi-weekly, once a month, bi-monthly, quarterly, every 6 months, or once a year. In addition, both the once a week and once a year conditions were examined in the absence of contrast counterfactuals to ensure that the frequencies did not have a direct effect on fairness perceptions. The manipulation of causal counterfactual salience was accomplished by providing participants with no additional information or stating that although the participant was given the opportunity, s/he had not told the boss how often s/he thought voice opportunities should be held. This manipulation was intended to make salient that the participant could have changed the outcome, but s/he did not. The explicit text used in each scenario is presented below:
Contrast: Not Salient; Direction: Upward; Causal: Not Salient. Consistent with the HR policy, your supervisor schedules an appointment at the end of each week. You later learn that the managers of other departments also schedule appointments at the end of each week.

Contrast: Not Salient; Direction: Downward; Causal: Not Salient. Consistent with the HR policy, your supervisor schedules an appointment at the end of each year. You later learn that the managers of other departments also schedule appointments at the end of each year.

Contrast: Salient; Direction: Upward; Causal: Not Salient. Consistent with the HR policy, your supervisor schedules an appointment at the end of each year. You later learn that the managers in other departments go above and beyond by scheduling appointments at the end of each week.

Contrast: Salient; Direction: Downward; Causal: Not Salient. Consistent with the HR policy, your supervisor schedules an appointment at the end of each week. You later learn that the managers in other departments only schedule appointments at the end of each year.

Contrast: Salient; Direction: Upward; Causal: Salient. Consistent with the HR policy, your supervisor schedules an appointment at the end of each year. You later learn that the managers in other departments go above and beyond by scheduling appointments at the end of each week to be consistent with the HR policy. You learn that other managers provide feedback once a week because their employees indicated a preference for this schedule. Although you were given the opportunity, you have not told your boss how often you think the meetings should be held.

Contrast: Salient; Direction: Downward; Causal: Salient. Consistent with the HR policy, your supervisor schedules an appointment at the end of each week. You later learn that the managers in other departments only schedule appointments at the end of each year to be
consistent with the HR policy. You learn that other managers provide feedback once a year because their employees indicated a preference for this schedule. Although you were given the opportunity, you have not told your boss how often you think the meetings should be held.

Contrast: Not Salient; Direction: Upward; Causal: Salient. Consistent with the HR policy, your supervisor schedules an appointment at the end of each week. You later learn that the managers of other departments also schedule appointments at the end of each week. You learn that other managers provide feedback once a week because their employees indicated a preference for this schedule. Although you were given the opportunity, you have not told your boss how often you think the meetings should be held.

Contrast: Not Salient; Direction: Downward; Causal: Salient. Consistent with the HR policy, your supervisor schedules an appointment at the end of each year. You later learn that the managers of other departments also schedule appointments at the end of each year. You learn that other managers provide feedback once a year because their employees indicated a preference for this schedule. Although you were given the opportunity, you have not told your boss how often you think the meetings should be held.

Measures

Fairness Assessment. In order to assess whether or not a fairness assessment occurred while reading the scenario, participants were asked to respond to a one-item measure: “While reading the scenario, I thought about fairness/justice” (1 = strongly disagree; 5 = strongly agree).

Event Fairness Perceptions. Event fairness perceptions were measured using a scale I developed in previous research, which was adapted from Ambrose and Schminke’s (2009) overall justice scale. Specifically, participants responded to a three-item measure. Items included: “In general, scheduling appointments for feedback once a week (year)
is__________.”; “For the most part, I would describe scheduling the appointments for feedback once a week (year) as________.”; “Most people would describe scheduling the appointments for feedback once a week (year) as __________.” In order to capture unfair, fair, and more than fair perceptions participants responded using the following scale: 1 = very unfair; 2 = somewhat unfair; 3 = somewhat fair; 4 = very fair; 5 = somewhat more than fair; 6 = way more than fair.

**Study 1 Results**

Table 3 contains all means and standard deviations for the dependent variables analyzed in Study 1. Hypothesis 1 predicted that fairness assessments are more common when contrast counterfactuals are salient. In order to investigate this prediction, I first performed a t-test with the single item fairness-assessment measure as the dependent variable and the Contrast Salient versus Contrast Not Salient conditions as the independent variable (Table 2, Cells 1, 2, 5 and 6 versus Cells 3, 4, 7, and 8). In support of Hypothesis 1, the t-test revealed a significant increase in fairness assessments in the Contrast Salient condition (\(M = 3.84, SD = 1.15\)) relative to the Contrast Not Salient condition (\(M = 3.27, SD = 1.04\)) \([t(492) = -5.82, p < .001]\) (See Table 4).

In order to ensure that this effect was not being driven by the Upward or Downward condition, I next ran the same t-test within the each of these conditions. The t-test in the Upward condition revealed a significant increase in fairness assessments in the Contrast Salient conditions (\(M = 3.90, SD = 1.01\); Table 2 Cells 3 and 7) relative to the Contrast Not Salient conditions (\(M = 3.28, SD = 1.12\); Table 2 Cells 1 and 5) \([t(256) = -4.62, p < .001]\). Similarly, the t-test in the Downward condition revealed a significant increase in fairness assessments in the Contrast Salient conditions (\(M = 3.78, SD = 1.06\); Table 2 Cells 4 and 8) relative to the Contrast Not Salient conditions (\(M = 3.25, SD = 1.19\); Table 2 Cells 2 and 6) \([t(234) = -3.63, p < .001]\).
Next, I limited the analysis to the conditions in which the causal counterfactual was not salient to ensure that the results were due to the salience of contrast rather than causal counterfactuals. The t-test in the Upward, Causal Not Salient condition revealed a significant increase in fairness assessments in the Contrast Salient condition ($M = 4.16, SD = 0.90$; Table 2 Cell 3) relative to the Contrast Not Salient condition ($M = 3.38, SD = 1.16$; Table 2 Cell 1) [$t(103) = -4.08, p < .001$]. Similarly, the t-test in the Downward, Causal Not Salient condition revealed a significant increase in fairness assessments in the Contrast Salient condition ($M = 3.90, SD = 0.96$; Table 2 Cell 4) relative to the Contrast Not Salient condition ($M = 3.25, SD = 1.28$; Table 2 Cell 1) [$t(107) = -3.01, p < .01$].

Finally, I tested the influence of the salience of causal counterfactuals when contrast counterfactuals were not salient to ensure that causal counterfactuals did not have a similar effect on fairness assessments. Although there were no hypotheses specifying this relationship, the model presumes that contrast rather than causal counterfactuals initiate fairness assessments. Thus, I expect that causal counterfactual salience will not significantly influence fairness assessments when contrast counterfactuals are not salient. In order to test this hypothesis, I ran a two-sample t-test with the single item measure of fairness assessments as the dependent variable and the Contrast Not Salient, Causal Salient condition (Table 2 Cells 5 and 6) versus the Contrast Not Salient, Causal Not Salient condition (Table 2 Cells 1 and 2) as the independent variable. Consistent with expectations the analysis revealed that there was not a significant difference between Causal Salient condition ($M = 3.21, SD = 1.10$) and the Causal Not Salient condition ($M = 3.33, SD = 1.21$) [$t(241) = .78, p = .44$]. Thus, the only significant differences in thinking about fairness occurred when a contrast counterfactual was salient versus not salient.
Hypothesis 2a predicted that events would be perceived as more unfair when upward contrast counterfactuals are salient compared to the absence of contrast counterfactuals. In order to investigate Hypothesis 2a, I first ran a t-test analysis with fairness perceptions as the dependent variable and the Upward, Contrast Salient conditions (Table 2 Cells 3 and 7) versus Contrast Not Salient conditions (Table 2 Cells 1 and 5) as the independent variable. Consistent with Hypothesis 2a, the results revealed that fairness perceptions were lower when an upward contrast counterfactual was salient ($M = 2.54, SD = .87$) relative to the condition in which no contrast counterfactual was salient ($M = 3.73, SD = .87$) [$t(369) = -12.55, p < .001]^2$.

Hypothesis 2b predicted that events will be perceived as more more-than-fair when salient downward counterfactuals are salient compared to the absence of contrast counterfactuals. In order to investigate Hypothesis 2b, I first ran a t-test analysis with fairness perceptions as the dependent variable and the Downward, Contrast Salient conditions (Table 2 Cells 4 and 8) versus Contrast Not Salient conditions (Table 2 Cells 2 and 6) as the independent variable. Consistent with Hypothesis 2b, the results revealed that fairness perceptions were higher when an upward contrast counterfactual was salient ($M = 4.65, SD = 1.41$) relative to the condition in which no contrast counterfactual was salient ($M = 3.74, SD = .06$) [$t(365) = 4.65, p < .001]^3$ (See Figure 2).

Hypothesis 3 predicted that the relationships proposed in Hypothesis 2 would be attenuated when causal counterfactuals are salient. Specifically, Hypothesis 2a suggests that salient upward counterfactuals generally cause events to be perceived as more unfair compared to when contrast counterfactuals are absent. However, Hypothesis 3 suggests that salient causal counterfactuals will attenuate this effect. Specifically, when upward contrast counterfactuals and causal counterfactuals suggest the focal individual as responsible for the discrepancy between
reality and the contrast, the event will be perceived as more fair (i.e., less unfair). In order to investigate this prediction, I performed an ANOVA within the Upward Direction conditions (Table 2 Cells 1, 3, 5, and 7). Thus, I ran the ANOVA with fairness perceptions as the dependent variable and the causal salience and contrast salience conditions as the independent variables. Supporting Hypothesis 3, the results within the Upward Contrast condition revealed a significant main effect of contrast counterfactual salience \[F(1,254) = 95.14, p < .001, \eta^2 = .27\], a significant main effect of causal counterfactual salience \[F(1,254) = 4.81, p < .05, \eta^2 = .19\], and a significant interaction effect \[F(1,254) = 15.60, p < .001, \eta^2 = .06\]. Moreover, the interaction was consistent with the proposed model (see Figure 3a). Specifically, there was not a significant difference between the causal salient and causal not salient conditions when the contrast counterfactual was not salient \[t(128) = 1.20, p > .10\]. This effect was expected because without a salient contrast counterfactual, fairness perceptions were predicted to default to fair regardless of the salience of causal counterfactuals. Moreover, when a contrast counterfactual was salient the event was perceived to be more unfair when a causal counterfactual was not salient compared to when a causal counterfactual was salient \[t(126) = -4.53, p < .001\].

Conversely, Hypothesis 2b suggests that salient downward counterfactuals generally cause events to be perceived as more-than-fair compared to when contrast counterfactuals are absent. However, Hypothesis 3 suggests that salient causal counterfactuals will attenuate this effect. Specifically, when downward contrast counterfactuals and causal counterfactuals suggest the focal individual as responsible for the discrepancy between reality and the contrast, the event will be perceived as more fair (i.e., less more-than-fair). In order to investigate this prediction, I performed an ANOVA within the Downward Direction conditions (Table 2 Cells 2, 4, 6, 8). Thus, I ran the ANOVA with fairness perceptions as the dependent variable and the causal
salience and contrast salience conditions as the independent variables. Supporting Hypothesis 3, the results revealed a significant main effect of contrast counterfactual salience \([F(1,233) = 6.31, p < .05, \eta^2 = .03]\), a significant main effect of causal counterfactual salience \([F(1,233) = 4.10, p < .05, \eta^2 = .02]\), and a significant interaction effect \([F(1,233) = 11.49, p < .001, \eta^2 = .05]\). Moreover, the interaction was consistent with the proposed model (see Figure 3b). Specifically, there was not a significant difference between the causal salient and causal not salient conditions when the contrast counterfactual was not salient \([t(112) = -1.36, p > .10]\). This effect was expected because without a salient contrast counterfactual, fairness perceptions were predicted to default to fair regardless of the salience of causal counterfactuals. Moreover, when a contrast counterfactual was salient the event was perceived to be more than fair when a causal counterfactual was not salient than when it was salient \([t(121) = -3.22, p < .01]\) (See Table 3).

**Study 1 Discussion**

The proposed model predicted that salient contrast counterfactuals evoke evaluations of fairness. As mentioned previously, several organizational justice scholars have suggested that fairness is the norm, and people are presumed to recognize fairness in juxtaposition against an experienced norm violation. Thus, by explicitly indicating that experienced treatment might not be consistent with expected norms (i.e., something else might have happened instead), contrast counterfactuals were expected to increase the likelihood that individuals would evaluate the fairness of an event (Hypothesis 1). Consistent with this prediction, participants in Study 1 were more likely to indicate that they thought about fairness when a contrast counterfactual was salient than when it was not.

The proposed model also suggested that events would be evaluated as less fair when contrast counterfactuals were salient. However, the direction of the fairness evaluation was
expected to correspond to the direction of the contrast counterfactual. Specifically, Hypothesis 2 predicted that salient upward counterfactuals (i.e., thoughts about how things might have been better) would increase perceptions that the event was unfair, whereas salient downward counterfactuals (i.e., thoughts about how things might have been worse) would increase perceptions that the event was more than fair. Consistent with this prediction, Study 1 revealed that being presented with a salient upward counterfactual (i.e., learning that other departments were given the opportunity to provide feedback every week, whereas they were only allowed to provide feedback once a year) resulted in evaluations that procedure was unfair compared to conditions in which no contrast counterfactual was explicitly presented. Conversely, being presented with a salient upward counterfactual (i.e., learning that other departments were given the opportunity to provide feedback every week, whereas they were only allowed to provide feedback once a year) resulted in evaluations that procedure was more than fair compared to conditions in which no contrast counterfactual was explicitly presented. What was particularly interesting about these results is that fairness perceptions did not differ significantly between being given the opportunity to provide feedback once a week or once a year when a contrast counterfactual was not presented. In other words, what made the procedure unfair, or more than fair was not inherent in the frequency with which the participants were allowed to give feedback. Rather, the events only became unfair or more than fair when presented of a contrast counterfactual. This result is even more interesting considering that voice represents an important social justice norm identified by the socially constructed justice literature (e.g., Colquitt, 2001). In contrast to the perspective that more voice leads to perceptions that the event is more fair, the current research suggests that more voice relative to a salient contrast counterfactual rather than absolute voice is what influences fairness perceptions.
Finally, the proposed model predicted that even when contrast counterfactuals are salient, the event might still be evaluated as fair when salient causal counterfactuals suggest that the focal individual was responsible for the experienced treatment. In order to test this hypothesis, the Causal Salient conditions indicated that the participant could have changed the policy if s/he had brought the issue to their boss. Thus the participant was expected to perceive that s/he was more responsible for the event and in turn perceive the event as more fair. Consistent with this prediction, the event was seen as more fair, as opposed to unfair, when upward contrast counterfactuals and causal counterfactuals were salient compared to the absence of causal counterfactuals. Similarly, the event was seen as more fair, as opposed to more than fair, when downward contrast counterfactuals and causal counterfactuals were salient compared to the absence of causal counterfactuals.

Combined the results of Study 1 provide initial support for the first three hypotheses in the developed model. However, Study 1 lacks the ecological validity necessary for evaluating the models hypotheses. Moreover, Study 1 did not assess the relationships between event fairness, entity fairness, and organizational citizenship behaviors. These hypotheses require the assessment of naturally occurring fairness assessments, which precluded the use of traditional cross-sectional and longitudinal methodologies. Specifically, evaluating the effects of event fairness evaluations on entity fairness evaluations require that individuals evaluate fairness events as they happen. Therefore, an experience sampling methodology was used to further evaluate the validity of the developed model.
STUDY 2

Participants

Participants (n = 170; 58.3% Male; Age = 32.4) working a minimum of 40 hours per week were recruited from a housing management company in the Southwest to participate in an experiential sampling study. Participants were entered into a raffle for one of 50, $25 gift cards for participation in the survey. The study required that each participant have access to a device at work and at home that they could use to access the surveys, and own a mobile phone with texting service through their mobile provider. This was to ensure that all alerts and surveys could be accessed at the appropriate times. Participants were also required to complete a 10 minute online training about the survey, complete two online surveys spaced one week apart, as well as complete a short survey any time they perceived that they were treated unfairly, fairly, or more than fairly throughout the workday. Participants were reminded that they were participating in the survey via text and/or email at the beginning of each day. 31.4% (n=215) of the employees at the company participated, of which 170 completed at least one week of the survey in which they initiated a fairness event. Participant positions included IT Specialists, Accountants, Marketers, Administrative Assistants, and Maintenance Workers.

Training Session

The training session was conducted using online videos and/or in person presentations conducted by the author. Participants were also instructed to contact the researcher with any remaining questions. The training session provided instructions regarding the purpose of the experiment as well as how to sign up for the study and how to access surveys. The training also provided instructions on what constitutes a fairness assessment. Fairness assessments were defined as any instances in which an experience the participant perceived to be unfair, fair or
more than fair. In addition, participants provided demographic information immediately following the training.

**Experiential Survey**

Any time that the participant encountered an instance of fair, unfair, or more than fair treatment, they were asked to complete a short survey. The survey was intended to test whether contrast and causal counterfactuals were salient during the fairness assessment and to examine how these counterfactual thoughts influenced accountability judgments and fairness perceptions. Both contrast and causal counterfactuals were assessed using both qualitative and quantitative methods.

*Event Description.* Participants were asked to “Please briefly describe the unfair, fair, or more than fair treatment that caused you to initiate this survey.” This item was intended to give the author some insight into the event that had initiated the fairness assessment. Participants were also asked to indicate how long ago the event had occurred. This item was intended to ensure that the fairness events had occurred immediately prior to initiating the survey. Results revealed that 80.2% of the event fairness surveys were initiated within the same day; and 18.8% were initiated within 3 days of the event.

*Fairness Perceptions.* Consistent with the measure used in Study 1, event fairness perceptions were measured using a five-item scale modified from Ambrose and Schminke (2009) to include more than fair response options. The items were “Overall, the event I described above was __________.”; “In general, I perceive the event was __________.”; “In general, the treatment I received was __________.”; “For the most part, the treatment I received was __________.”; “Most of the people who work here would say that the event was __________.”
Response anchors were: 1 = very unfair; 2 = somewhat unfair; 3 = somewhat fair; 4 = very fair; 5 = somewhat more than fair; 6 = way more than fair.

**Contrast Counterfactual Salience.** Contrast counterfactual salience was measured with a single, yes/no item: “Did you compare your experience against something that might have been better or worse?” If the participant responded “yes”, s/he was also asked to briefly describe who or what s/he compared the experience against.

**Contrast Counterfactual Direction and Magnitude.** Participants were asked to respond to a three-item scale that assessed whether the alternative was better or worse than the experienced event. Items were adapted from previous counterfactual research to explicitly assess contrast counterfactuals (e.g., Chan & Ngai, 2010; Nicklin & Williams, 2009; Nicklin et al., 2011; Spencer & Rupp, 2009). The items were: “I would have felt ____________, if I had been treated in a manner more consistent with my personal standards”; “My well-being would have been ____________, if I had been treated in a manner more consistent with my personal standards”; “It would have been ________________, if I had been treated in a manner more consistent with my personal standards.” Responses were recorded on a 5-point scale ranging from 1 = “a lot worse” to 5 = “a lot better.”

**Causal Counterfactual Salience.** Causal counterfactual salience was measured with a single, yes/no item: “Did you think about how someone or something could have changed the treatment you received?” If the participant responded “yes”, s/he was also asked to briefly describe who or what s/he was responsible for the event s/he experienced.

**Causal Counterfactual Implicating the Participant.** All participants were asked to respond to a three-item scale that assessed the extent to which they perceived that they were responsible for the experienced event. These items were adapted from previous research on
counterfactual thoughts (e.g., Chan & Ngai, 2010; Nicklin & Williams, 2009; Nicklin et. al., 2011; Spencer & Rupp, 2009) and were adapted to explicitly reference causal counterfactual thoughts. These items were: “I could have done something differently to change how I was treated?”; “I believe I was responsible for how I was treated?”; “I believe my actions influenced how I was treated?” Responses were recorded on a 5-point scale ranging from 1 = “strongly disagree” to 5 = “strongly agree.”

_Causal Counterfactuals Implicating the Supervisor._ Participants were also asked to respond to a three-item scale that assessed the extent to which they perceived that their supervisor was responsible for the event. These items were: “I believe my supervisor could have done something differently to change how you were treated?”; “I believe my supervisor was responsible for how I was treated?”; “I believe my supervisor’s actions influenced how I was treated?” Responses were recorded on a 5-point scale ranging from 1 = “strongly disagree” to 5 = “strongly agree.”

**Weekly Survey**

Prior to beginning the experiential surveys participants were asked to complete baseline measures of entity fairness perception and OCBs directed toward their supervisor. These surveys were collected upon the commencement of the survey and at one week intervals thereafter.

_Entity Fairness Perceptions._ The entity fairness perceptions scale was adapted from Ambrose and Schminke (2009), Similar to the event fairness perception measure, this scale was adapted to include a more than fair response options. The items were: “Overall, I'm treated _________ by my supervisor;” “In general, I can count on this supervisor to be _________;” “In general, the treatment I receive from my supervisor around here is ________;” “Usually, the way things work with my supervisor are ________;” “For the most
part, my supervisor treats his/her employees ___________;” “Most of the people who work here would say they are often treated ___________ by my supervisor.” The response scale was as follows: 1 = very unfair; 2 = somewhat unfair; 3= somewhat fair; 4 = very fair; 5 = somewhat more than fair; 6 = way more than fair.

**OCB.** In order to assess accountability behaviors, participants were asked to respond to a modified OCB-I scale (Williams and Anderson, 1991) that referenced intentions because the participants might not actually have the opportunity or resources to engage in the behaviors in a one-week period. Items were: “I plan to help my supervisor get his/her job done (even when not asked) in the next week;” “I plan to slow down paperwork and other projects to make my supervisor look bad in the next week;” “I plan to frequently gossip about my manger behind his/her back in the next week;” “I plan to do everything I can to help my supervisor in the next week;” “I plan to try to assist my supervisor by going above and beyond my job duties in the next week.”

**Study 2 Results**

The use of experiential sampling in this study differs somewhat from typical ESM studies. Specifically, most ESM studies collect data once a day for all within person variables. In the current study, these within person variables would be represented by fairness assessments. However, I was simply interested in getting information about fairness assessments in situ, not in understanding cumulative effects (see Hausknecht, Sturman, & Roberson, 2011 for the cumulative effects of event fairness on subsequent fairness assessments). Thus, although lagged data was collected for a three-week period, the hypotheses are related to the initial fairness assessment provided by each participant and the entity surveys immediately prior to and after
that event. Moreover, I focused the analysis on supervisor entity fairness and supervisor directed OCB intentions in order to limit the possible outcome variables.

*Test of Individual Hypotheses.* In order to simplify testing the proposed model, I only used the data relevant to the first time a participant initiated a fairness assessment survey. All analyses were done using the first fairness assessment and the weekly survey data collected immediately prior to and immediately after the first time the participant initiated a survey. Furthermore, in order to ensure that overall fairness assessment frequency - either due to a particular hostile workplace or a personality that was highly sensitive to justice – I controlled for the number of times each participant initiated a survey in all analyses. I also controlled for whether the individual’s position was service oriented (i.e., Accountants, Admin Assistants, and Marketers) or technical (i.e., Maintenance Workers and IT Specialists) in all analyses. See Table 5 for Study 2 descriptive statistics and correlations.

Hypothesis 1 predicted that fairness assessments would be prompted by salient contrast counterfactuals. Although not a valid statistical or causal test, 96% of those who initiated a fairness assessment indicated that s/he had compared the experienced event against an alternative. Thus, supporting Hypothesis 1 an overwhelming majority of the people who initiated a fairness assessment evaluated the experience against a contrast counterfactual.

Hypothesis 2 predicted that the direction and magnitude of the discrepancy between the experienced event and the salient contrast counterfactual would influence event fairness perceptions. In order, to investigate this prediction, I performed as simple regression with event fairness perceptions from the first participant initiated fairness assessment as the dependent variable and the direction and magnitude of the contrast counterfactual as the independent variable. Supporting Hypothesis 2, the results revealed as significant relationship between the
direction and magnitude of the contrast counterfactual and event fairness perceptions \( \beta = -.49, \) 
S.E. = .11, \( p < .001, \) \( R^2 = .23 \). Neither the type of job, nor the number of fairness surveys the participant initiated were significantly related to event fairness perceptions (See Table 6).

Hypothesis 3 predicted that the influence of the direction and magnitude of salient contrast counterfactuals on event fairness perceptions would be moderated by the extent to which the recipient was considered to be accountable for the experienced treatment. In order to test this hypothesis, I performed a hierarchical regression entering contrast counterfactual direction and recipient accountability in step 1 and the interaction term in step 2. The dependent variable was event fairness perceptions (see Table 7). Supporting Hypothesis 2, the results revealed a significant effect of the contrast counterfactual direction and magnitude on fairness perceptions even when causal counterfactual salience and the interaction effect were also in the model (\( \beta = -.72, p < .001 \)). Moreover supporting Hypothesis 3 there was a significant effect of the interaction between the contrast counterfactual and the salience of a causal counterfactual implicating the participant as responsible (\( \beta = .63, p < .01; \Delta R^2 = .03, p < .01 \)).

In addition, analysis using the Johnson-Neyman technique identified two regions of significance. In other words, this analysis revealed one level of the moderator (i.e., causal counterfactual salience) in which the independent variable (i.e., contrast counterfactual direction and magnitude) significantly affected the dependent variable (i.e., event fairness) and one level of the moderator in which there was no significant effect. Specifically, the contrast counterfactual direction and magnitude had a significant negative effect on event fairness perceptions when causal counterfactuals implicating the participant as responsible were rated as 3.29 or below. However, the effect became non-significant when the participants responded above 3.29. This number is particularly interesting considering the scale anchors for the measure
of causal counterfactuals. That is the number 4 on the anchor scale is the first number to agree that the participant was responsible for the experienced treatment.

Hypothesis 4 predicted that the relationship between event fairness and entity fairness perceptions would be moderated by the extent to which the entity was considered accountable for the unfair event, when controlling for prior entity fairness perceptions. In order to test this hypothesis, event fairness perceptions and supervisor accountability were entered as the independent variables. The initial supervisor entity fairness perceptions were entered as a control variable. Supervisor entity fairness perceptions measured after the first fairness event was entered as the dependent variable (See Table 8). In support of Hypothesis 4, there was a significant interaction between event fairness perceptions and supervisor accountability judgments on subsequent entity fairness perceptions controlling for supervisor entity fairness perceptions prior to the first fairness event ($\beta = -.40, p < .05; \Delta R^2 = .01, p < .05$). However, the results also revealed that the moderation effect was due to a significant change in the effect of event fairness perceptions on entity fairness perceptions, rather than a change from a non-significant effect to a significant effect. Specifically, the effect of event fairness perceptions on entity fairness perceptions one standard deviation below the mean of the moderator was significant ($t(139) = 7.82, p < .001$); and effect of event fairness perceptions on entity fairness perceptions one standard deviation below the mean of the moderator was significant ($t(167) = 13.57, p < .001$). In other words, although the effect of event fairness perceptions on supervisor entity fairness perceptions were always significant the effect was significantly stronger as causal counterfactuals implicating the supervisor as responsible for the event increased.

Hypothesis 5 predicted that entity fairness perceptions would be directly related to intentions to engage in OCBs. In order to perform this analysis I regressed OCB intentions at
time 2 on entity fairness perceptions at time 1 controlling for entity fairness perceptions at time 1. As in all Study 2 analyses I also controlled for the job type and number of surveys initiated by the participant. In support of Hypothesis 5, the results revealed a significant effect of entity fairness perceptions on OCB intentions ($\beta = .34, p < .001; \Delta R^2 = .11, p < .001$; See Table 9).

Hypothesis 6 predicted that the interaction between event fairness perceptions and supervisor accountability on accountability behaviors would occur via entity fairness perceptions. Therefore, I ran a moderated mediation model with event fairness as the independent variable, entity accountability as the moderator of the relationship between event fairness and supervisor entity fairness, and accountability behaviors (OCBs) as the dependent variables. Moreover, I entered supervisor entity justice and accountability behaviors (OCBs) prior to the first fairness event as control variables. Next, I used bootstrapping procedures to draw 1,000 random samples with replacement from the full sample in order to place 95% confidence intervals around the estimates of the indirect effects (Edwards & Lambert, 2007). Bootstrapping provides evidence of mediation if the bias-corrected 95% confidence interval excludes zero for indirect effects. In support of Hypothesis 6, the confidence intervals exclude zero for the indirect effects of the interaction between event fairness perceptions and causal counterfactuals implicating the supervisor as responsible on OCBs through supervisor entity fairness (Unstandardized $\beta = .02; SE = .01; 95\% CI: .003, .050$). For further interpretation Table 10 presents the direct and indirect effects of Type of Thought on behavioral reactions at each level of Subjective Ease.

**Study 2 Discussion**

Study 2 extends the findings in Study 1 in two important ways. First, Study 2 provides a conceptual replication of the findings in Study 1 in a new and ecologically valid context. Specifically, Study 2 found that 96% of participants indicated that a contrast counterfactual was
salient when they initiated their first fairness assessment. Although there is not statistical significance test and there is no way to determine causality, combined with the causal test in Study 1, these results reveal the importance of contrast counterfactuals to the initiation of fairness assessments. Moreover, Study 2 found that the direction and magnitude of salient contrast counterfactuals had a significant direct effect on event fairness perceptions. Although Study 1 explicitly provided salient contrast counterfactuals, Study 2 allowed participants to rate their own contrast counterfactuals for a given event. Nonetheless, the results were the same. Specifically, the worse the contrast counterfactual was the more-than-fair the event was perceived to be and, conversely, the better the contrast counterfactual was the more unfair the event was perceived to be. Finally, consistent with the results supporting Hypothesis 3 in Study 1, the results of Study 2 revealed that the extent to which the participant perceived that s/he was responsible for experienced treatment significantly moderated the influence of the direction and magnitude of the contrast counterfactual on fairness perceptions. Specifically, the effect was attenuated by increased perceptions that the participant perceived s/he was responsible for the event.

Second, Study 2 was able to evaluate the influence of event fairness perceptions on subsequent entity fairness perceptions and OCBs. The contrived nature of Study 1, like all laboratory experiments, made it difficult to account for prior entity fairness perceptions. Thus, Study 2’s methodology was better suited for examining Hypotheses 4 and 5. Consistent with the proposed model Study 2 found that event fairness perceptions influenced entity fairness perceptions to the extent that the entity was presumed to be accountable for the experienced event. In other words, unfair events were more likely to increase perceptions that the participant’s supervisor was unfair as perceptions that the supervisor was responsible for the
event increased. Similarly, more-than-fair events were more likely to increase perceptions that the participant’s supervisor was fair as perceptions that the supervisor was responsible for the event increased. Furthermore, the effect of event fairness perceptions on organizational citizenship behaviors were found to occur via entity fairness perceptions when controlling for prior entity fairness perceptions. In other words, as predicted by the proposed model, entity fairness perceptions, rather than event fairness perceptions, seem to be the proximal antecedent of helping behaviors directed toward an entity.

GENERAL DISCUSSION

The primary motivation for this dissertation was development a more explicit and theoretically grounded model of fairness perception formation. To this end, I provided a review and critique of the widely cited fairness theory (Folger & Cropanzano, 1998, 2001). Specifically, I emphasize the important, yet inadequate, development of the relationships between counterfactual thoughts, accountability judgments, and fairness perceptions. Throughout the review I suggested several revisions to fairness theory based on theoretically grounded and empirically tested frameworks from the cognitive psychology literature, and contemporary organizational justice research.

First, I proposed that the ambiguously stated, empirically untested, and theoretically weak Would, Could, Should counterfactual typology presented by Folger and Cropanzano (1998, 2001) be replaced by the empirically supported and theoretically grounded contrast/causal typology proposed by Roese and colleagues (e.g., Epstude & Roese, 2008; Roese & Morrison, 2009). Second, drawing from contemporary organizational justice research I suggested that there is a need to distinguish between the accountability judgments associated with event versus entity fairness perceptions. Specifically, drawing from research on the entitlement perspective (e.g.,
Feather, 1993, 1999) I suggested that event fairness perceptions are evaluated through an assessment of the extent to which the focal individual was responsible for the experienced treatment. In other words, “Did I deserve to be treated this way?” However, I suggested that entity fairness perceptions are evaluated through an assessment of the extent to which a particular individual was responsible for the experienced treatment. In other words, “How responsible was my supervisor for the treatment I experienced?” The latter is more consistent with fairness theories treatment of accountability judgments, but because the distinction between entity and event fairness was not salient to organizational justice scholars at the time this distinction had not been previously asserted. Thus, although the revised model maintains many of the building blocks presented in fairness theory (e.g., counterfactual thoughts and accountability judgments), the revised model differs substantially from fairness theory.

Summary of Proposed Model and Study Results

Using this revised version of fairness theory as a foundation, I developed an explicit model of the cognitive processes involved in the formation of fairness perceptions. First, the developed model hypothesizes that event fairness assessments are initiated by salient contrast counterfactuals. When individuals are made aware that things might have been better or worse they are presented with evidence the experienced treatment might have been different. Since the event might not have been consistent with a presumed norm, participants are presumed to be more likely to assess the fairness of the event (H1).

Consistent with Hypothesis 1, both Study 1 and Study 2 reveal a strong relationship between salient contrast counterfactuals and thoughts about fairness. Specifically, Study 1 found that explicitly presenting contrast counterfactuals to participants significantly increased the likelihood that participants thought about fairness. Interestingly, this was true whether the
contrast was positive or negative. In other words, both salient downward contrast counterfactuals about how things might have been worse, and salient upward contrast counterfactuals about how things might have been better increased the likelihood that the participants thought about fairness. Thus, positive outcomes, procedures, and interpersonal interactions might deserve more attention from the organizational justice literature, which has traditionally focused on negative events.

In addition to the evidence provided by Study 1, Study 2 found that 96% of the participants indicated that a contrast counterfactual was salient when they initiated their first fairness assessment. Although this number does not represent a statistical test, the incredibly high percentage of people indicating that contrast counterfactuals were present when they evaluated fairness suggests that salient contrast counterfactuals play an important role in fairness evaluations.

Second, the model hypothesizes that the direction and magnitude of salient contrast counterfactuals will directly influence event fairness perceptions (H2). Specifically, salient upward contrast counterfactuals, which suggest that the experienced treatment might have been better, are hypothesized to increase perceptions that the experienced treatment was unfair. Conversely, salient downward contrast counterfactuals, which suggest that the experienced treatment might have been worse, are hypothesized to increase perceptions that the experienced treatment was more than fair.

Consistent with Hypothesis 2, the results of both Study 1 and Study 2 demonstrate that the direction of contrast counterfactuals influence fairness perceptions. Specifically, explicitly presenting an upward contrast counterfactual to participants in Study 1 (i.e., telling participants that supervisors in other departments granted more voice opportunities to employees) increased perceptions that the frequency of voice opportunities in his/her department was unfair.
Conversely, explicitly presenting a downward contrast counterfactual to participants in Study 1 (i.e., telling participants that supervisors in other departments granted fewer voice opportunities to employees) increased perceptions that the frequency of voice opportunities in his/her department was more than fair. What was particularly interesting about the results of Study 1 was that the absolute frequency of voice opportunities (i.e., once a month or once a year) did not affect fairness perceptions in the absence of an explicit contrast counterfactual. In other words, what made the frequency of voice opportunities unfair, or more-than-fair was the presence of upward, or downward contrast counterfactuals rather than the policy implemented by the supervisor, per se.

In addition to the support for Hypothesis 2 found in Study 1, Study 2 found that the direction and magnitude of personally salient contrast counterfactuals had a significant influence on fairness perceptions ranging from unfair to fair to more than fair. Specifically, participants were asked to indicate the extent to which salient contrast counterfactuals indicated that the experienced treatment might have been a lot worse to a lot better. Consistent with Hypothesis 2, the better the contrast counterfactual made the experienced treatment seem, the more more-than-fair the event was; and the worse the contrast counterfactual made the experienced treatment seem, the more unfair the event was.

Third, the model hypothesizes that the effect of the direction and magnitude of contrast counterfactuals on fairness perceptions is attenuated by the extent to which causal counterfactuals indicate that the focal individual (i.e., the participant) is responsible for the experienced treatment. Specifically, the negative influence upward counterfactuals have on perceptions that the event was unfair are hypothesized to be attenuated by perceptions that the participant was responsible for the experienced treatment. Similarly, the positive influence
downward counterfactuals have on perceptions that the event was more than fair are hypothesized to be attenuated by perceptions that the participant was responsible for the experienced treatment.

Consistent with Hypothesis 3, both Study 1 and Study 2 found that the responsibility of the participant significantly attenuated the influence of contrast counterfactuals on perceptions that the event was unfair, or more than fair. Study 1 explicitly presented a causal counterfactual to participants suggesting that s/he could have spoken with their supervisor to change the frequency of voice opportunities. When both an upward counterfactual (i.e., other departments provided more voice opportunities to its employees) and a causal counterfactual implicating the participant as responsible (i.e., you could have spoken to your supervisor to make a change) were explicitly made salient, the participants were less likely to perceive the event as unfair when compared to the condition in which an upward counterfactual was salient but no causal counterfactuals were salient. Similarly, when both an downward counterfactual (i.e., other departments provided fewer voice opportunities to its employees) and a causal counterfactual implicating the participant as responsible (i.e., you could have spoken to your supervisor to make a change) were explicitly made salient the participants were less likely to perceive the event as more than fair when compared to the condition in which a downward counterfactual was salient but no causal counterfactuals were salient.

In addition to the evidence for Hypothesis 3 provided by Study 1, Study 2 demonstrated similar results. Specifically, participants’ perceptions of the extent to which s/he was responsible for experienced treatment significantly attenuated both the positive effect of downward, and the negative effect upward counterfactuals on fairness perceptions. Moreover, the results of the Johnson-Neyman analysis revealed that the effect of the direction and magnitude of contrast
counterfactuals on fairness perceptions was significant below a score of 3.69 on the accountability scale and non-significant above 3.69. What is particularly interesting about this result is that the accountability scale number 3 was associated with “neither agree nor disagree” and number 4 was associated with “slightly agree”. In other words, the effect of contrast counterfactuals on fairness perceptions was not significant so long as there was some agreement that the participant was responsible for the experienced treatment.

Fourth, the developed model hypothesizes that entity fairness perceptions are influenced by event fairness perceptions to the extent that causal counterfactuals implicate the entity as responsible for the fairness of the event, while controlling for previous entity fairness perceptions (H4). Consistent with many organizational justice scholars (e.g., Cropanzano, et al., 2001), the current model presumes that entity fairness perceptions are relatively enduring. Thus, although any particular event is likely to sway entity fairness perceptions in a positive or negative way, it is unlikely to determine entity fairness perceptions on its own. For example, a particular unfair supervisor who does one fair thing might be evaluated as slightly less unfair, but probably not reevaluated as fair or more than fair. Moreover, the current model presumes that event fairness perceptions only influence entity fairness perceptions to the extent that the entity is considered responsible for the event. For example, if my supervisor had no control over the bonuses it would be difficult to evaluate him/her as more unfair because I received an unfair bonus.

Consistent with Hypothesis 4, Study 2 demonstrates that the significant effect of event fairness perceptions on the participant’s supervisor’s entity fairness is moderated by the extent to which the participant perceives their supervisor to be accountable for the event while controlling for the entity fairness perceptions recorded prior to the first fairness assessment initiated by the participant. The proposed model did, however, also find a significant main effect of event
fairness perceptions on supervisor fairness perceptions. Although this was not necessarily expected, there are several potential explanations for this effect. For one, Study 2 asked participants to focus on the fairness of their supervisors during the weekly assessments. Thus, participants might have been more aware of fairness events initiated by their supervisor, or might have been more likely to report these events. Moreover, the results revealed that no participants indicated that they strongly disagreed that his/her supervisor was responsible for the event. Thus, the results might have occurred because all participants perceived that their supervisors were at least partially responsible for the event. This might have been specific to the current context, or perhaps employees inherently blame their supervisors to some extent for fairness events in the workplace because they represent a position of authority. Future research will need to address these issues.

Fifth, the developed model hypothesizes that event fairness perceptions will influence accountability behaviors via entity fairness perceptions (H5). Although specific events might have a short term influence on how people interact with other social entities, the long term nature of employment suggest that people are more likely to consider the person as a whole rather than a specific instance when deciding to help the individual.

Consistent with Hypothesis 5, the results of Study 2 demonstrated that entity fairness perceptions mediated the influence of event fairness perception on organizational citizenship behaviors. Although the research has several potential limitations and requires replication, the results of Study 1 and Study 2 seem to provide substantial support in favor of the proposed model.
Theoretical Implications

This dissertation contributes to the organizational justice literature in several ways. First, this dissertation highlights several issues that should be recognized by organizational scholars who wish to use fairness theory as conceptual justification for their own research. As my review reveals, fairness theory has had a significant impact on the organizational justice literature. However, the ambiguous and often contradictory interpretation of fairness theory’s model combined with scant empirical research has led to discrepant interpretations of the theory. Thus, I hope that this dissertation will add to the organizational justice literature by illuminating the shortcomings of fairness theory and motivating organizational justice scholars to be prudent in their application and interpretation of the fairness theory.

Second, the developed model provides an alternative to the traditional organizational justice paradigm. One of the most dominant organizational justice paradigms suggest that fairness perceptions are evaluated through a lens of societal norms and values (Cropanzano, Rupp, Mohler, & Schminke, 2001; Colquitt & Greenberg, 2003). In the highly cited organizational justice meta-analysis Colquitt et al. (2001) state, “In research in the organizational sciences, justice is considered to be socially constructed. That is, an act is defined as just if most individuals perceive it to be so on the basis of empirical research” (p.425). Consistent with this perspective, a large body of organizational justice research has concentrated on identifying the socially constructed justice norms that empirically correlate with fairness perceptions (See Colquitt, Greenberg, & Zapata-Phelan, 2005 for a review of this literature). The culmination of this work has been the identification of justice norms, or rules, that fall under three distinct categories: (1) the distribution of outcomes across multiple parties (distributive justice; e.g., Adams, 1965); (2) the processes used to determine how outcomes are distributed (procedural
justice; e.g., Thibaut & Walker, 1975); and (3) the interpersonal treatment associated with delivering the outcomes (interactional justice; Bies & Moag, 1986). Over the years, the perspective that these socially constructed norms define fairness has become so dominant that many organizational justice researchers operationalize fairness solely on the basis of the justice norms identified by this literature.

Although this perspective has received much attention over the last 20 years, more recent research is beginning to emerge suggesting that these social justice rules do not fully account for fairness perceptions (e.g. Ambrose & Schminke, 2009, Holtz & Harold, 2009; Jones & Martens, 2009). Rather, several scholars have suggested that fairness is often more holistic (e.g., Ambrose & Schminke, 2009) and personal (e.g., Cropanzano, Stein, & Nadisic, 2011) than the socially constructed perspective allows. Studies demonstrating that social justice rules only account for approximately 30-40% of the variance in responses to overt fairness measures (i.e., Overall, the treatment I receive around here is fair) further validates the claims that fairness if often in the eye of the beholder (e.g. Ambrose & Schminke, 2009, Jones & Martens, 2009). Moreover, these studies demonstrate that overt measures of justice are more strongly correlated with important organizational outcomes (e.g., organizational commitment, turnover, organizational citizenship behaviors, etc.) than the socially constructed justice rules. Thus, the processes involved in evaluating fairness seem to go beyond the assessment of socially constructed justice rule violations. As a result several researchers have called for a more comprehensive theory to describe the mental processes involved in evaluating fairness in the workplace.

While the socially constructed justice rules might play an important role as commonly used contrast counterfactuals, the proposed model suggests a model for understanding fairness as a personal and contextually determined phenomenon. Specifically, the idiosyncratic nature of
counterfactual thoughts provides a useful model of the cognitive processes that influence personal fairness perceptions. Moreover, the proposed model can account for the previously identified socially constructed justice norms. Specifically, it is likely that these rules represent the most commonly used contrast counterfactuals. In addition to personalizing fairness, the proposed model also highlights the importance of accountability judgments, which have largely been neglected by the socially constructed perspective. Thus, the model developed herein presents an alternative perspective to traditional justice research, which might further contribute to modeling the variance in fairness perceptions that remain unexplained by the socially constructed justice norms.

Third, the developed model provides one of the first explicit frameworks for modeling the formation of perceptions that events and entities are more than fair. Although a few researchers have suggested that more than fair is an important component of fairness perceptions (e.g., Gilliland, 2008) there has been little theory or empirical research around this concept. Moreover, both Study 1 and Study 2 demonstrate that when given the option, people often perceive events and entities as more than fair. Thus, people seem to have a naïve conception of more than fair treatment in addition to unfair and fair treatment. Further, consistent with the proposed model, the results of both Study 1 and Study 2 indicate that unfair and more than fair perceptions can be differentiated from one another. Specifically, upward contrast counterfactuals increase perceptions that the event was unfair, whereas downward contrast counterfactuals increase perceptions that the event was more than fair. Further, perceptions that an entity is unfair decreases motivation to help that entity; whereas perceptions that an entity is more than fair increase motivation to help that entity. Thus, more than fair seems to be an important component of organizational justice, which has, thus far, been understudied.
Practical Implications

In addition to the theoretical implications of this dissertation, the proposed model and empirical evidence presented herein also suggest several implications for organizations and supervisors. First, the socially constructed perspective has become so dominant that a large portion of consulting and assessments of fair treatment are conducted using measures similar to the Colquitt (2001) scale. Considering the unexplained variance in fairness perceptions demonstrated in prior research and the empirical evidence presented herein suggesting that fairness is often personal, new measures should be developed to create more appropriate assessments of workplace fairness.

Second, the identification of naïve perceptions of more than fair treatment and its added benefit to organizational citizenship behaviors suggests that supervisors and organizations should not see fair treatment as the upper limit. Instead, organizations should at least consider striving toward achieving an organizational culture that is perceived too be more than fair. Nonetheless, this research is still in its infancy and it would be prudent to advise organizations that the contexts that create more than fair perceptions are still largely unknown. Moreover, caution should be taken as one man’s more than fair treatment might often be another’s unfair treatment.

Third, the evidence suggesting that contrast counterfactuals are largely associated with fairness perceptions, organizations might attempt to manage fairness perceptions via setting expectations and providing adequate explanations. For example, news of a layoff might be preceded by the communication of outcome-consistent information, such as poor economic conditions, the fact that other companies are engaging in similar practices, and the apparent inevitability of this decision given the circumstances. I would expect that when employees experience the justice violation, these thoughts would alleviate the salience of contrast
counterfactuals, thereby attenuating negative reactions. However, I do not wish to suggest that organizations should attempt to substitute induced outcome-consistent thinking for actually attempting to correct workplace injustice. Over time, this disingenuous approach might backfire and exacerbate negative behaviors. However, much of reality seems to lie in perception. Thus, appropriately managing the fairness perceptions of employees is important to attenuating negative behavioral reactions. Doing so may promote positive behaviors associated with organizational justice, such as job satisfaction and organizational citizenship behaviors, and reduce negative behaviors associated with injustice, including absenteeism, theft, turnover, and other counterproductive work behaviors.

**Limitations and Directions for Future Research**

Despite the considerable initial evidence in favor of the proposed model, both the theory and empirical evidence are limited in several ways. For one, the content of the counterfactual used to determine fairness remains unexamined. In Study 1, the content of the contrast counterfactuals was explicit but limited to considerations of a procedural issue commonly studied in the organizational justice literature. Thus, although study 1 extends prior research by demonstrating the importance of contrast counterfactual salience to fairness perceptions, it does not further illuminate the content of contrast counterfactuals. In fact, it is likely that the most common contrast counterfactuals used to evaluate fairness perceptions are those identified by the socially constructed perspective (e.g., Colquitt, 2001). However, more research is needed to further understand how and when the content of counterfactual thoughts influence fairness evaluations.

In addition, the results of the study herein were somewhat limited by the samples used. Specifically, Study 1 participants were recruited via mTurk, and the Study 2 participants were
recruited be a real-estate management company in the Southwest. Although the consistent results across these populations provide some evidence in favor of the proposed model, these are relatively unique populations. Thus, future research should examine the model in other contexts to further demonstrate the validity of the proposed model.

CONCLUSION

Over the past decade, fairness theory has had a wide influence on the organizational justice literature. Representing one of the few models of fairness perception formation that considers the cognitive processes that influence fairness perceptions, organizational justice scholars have often cited the theory. However, the imprecise, ambiguous language in the seminal chapters, as well as discrepancies in subsequent interpretations and scant empirical evidence has limited its ability to continue to influence the organizational justice literature. In this dissertation I reviewed and critiqued fairness theory’s model to provide a more explicit model of fairness perception formation via integration with well-grounded and empirical evidence from the cognitive psychology literature and contemporary organizational justice research. The developed model suggests that fairness evaluations are largely contingent on the salience of contrast and causal counterfactuals, which suggest how much better or worse the event could have been and the extent to which various agents were responsible for experienced treatment, respectively. Moreover, the developed model differentiates between the accountability judgments used to evaluate event versus entity fairness perceptions. Two studies present initial evidence in favor of the proposed model. In an era of organizational justice where scholars are calling for new models of organizational justice that consider processes beyond the traditional justice rules identified by the socially constructed context, this dissertation attempts to provide an alternative idiosyncratic perspective that emphasizes accountability and personal and situational characteristics.
Tables

Table 1. Fairness Theory Models

<table>
<thead>
<tr>
<th>Model</th>
<th>Citation</th>
<th>Counterfactuals &amp; Accountability</th>
<th>Accountability &amp; Fairness</th>
<th>Counterfactuals &amp; Fairness</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL 1</td>
<td></td>
<td>In effect, an individual composes a sense of accountability from these three judgments – injury [Would], conduct [Could] and standards [Should] are the constituent elements from which blame is built. (2001, p. 5, text in parentheses added)</td>
<td>If no one is to blame, there is no social injustice. (2001, p. 1)</td>
<td>As we have emphasized, fairness is based on accountability. Accountability, in turn, is based on three judgments-Would, Could, and Should. (2001, p. 32)</td>
</tr>
<tr>
<td>Would</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Should</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Empirical studies that cite fairness theory as support for each relationship

|--------|-----------------------------------------------|--------------|--------------------------|

**MODEL 2**

<table>
<thead>
<tr>
<th>Would</th>
<th>Fairness Perceptions</th>
<th>Behaviors that Hold the Entity Accountable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Accountability</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Should</td>
<td></td>
<td>Could</td>
</tr>
</tbody>
</table>

Fairness Theory proposes conceptually separable psychological processes governing perceptions of impact magnitude and perceptions of accountability, much like a distinction between the amount of damage (or its severity) versus how and why it occurred. As we noted, the Would aspect of the theory concentrates on magnitude impact, whereas Could and Should concentrate on accountability. (1998, p. 181)

Perhaps even if a supervisor's actions seem unfair, employees might tend to hold hostile responses in check when they perceive that the supervisor had no choice...Before responding negatively toward someone as a source of unfairness, people in essence ask whether that person had other feasible options—alternatives over which personal control could be exercised. (2001, p. 46)

Would judgments reflect differences between actual and counterfactual (i.e., referent) events as two classes of experience. An actual unfairness...differs from fairness as the counterfactual. (2001, p. 32)

The Could and
Should criteria affect the extent to which someone is held accountable for violating a moral norm of fairness only if both sets of requirements for guilt meet a sufficiency test... If either component fails to reach a bonding threshold, the bond is broken, and the initially accused party cannot be held accountable after all. (1998; p.189)

<table>
<thead>
<tr>
<th>Empirical studies that cite fairness theory as support for each relationship</th>
<th>Shaw et al., 2003; Colquitt &amp; Chertkoff, 2002</th>
<th>Horvath &amp; Andrews, 2007</th>
<th>McColl-Kennedy &amp; Sparks, 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODEL 3</strong></td>
<td>In fairness theory terms, the Outcome x Process interaction is a Would (negativity) by Could/Should (accountability) interaction. (2001, p. 35)</td>
<td>Again, an event's negative impact on someone's experienced well-being [Would] has no influence on responses directed toward another person, unless the former holds the latter accountable</td>
<td>Same as Model 2</td>
</tr>
</tbody>
</table>
for key implications of that event…The negative implications of being laid off might seem severe to some and only mild to others. Nonetheless, the variations in experienced negativity would tend not to be correlated with negative responses that target management, such as calling management unfair or increasing the level of retribution to correspond with the level of negativity experienced. (1998, p. 179, text in parentheses added)

<table>
<thead>
<tr>
<th>Empirical studies that cite fairness theory as support for each relationship</th>
<th>Same as Model 2</th>
<th>Gilliland, et al. (2001)</th>
<th>Same as Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Citation</td>
<td>Counterfactuals &amp; Accountability</td>
<td>Counterfactuals &amp;</td>
</tr>
</tbody>
</table>
MODEL 1

<table>
<thead>
<tr>
<th>Accountability</th>
<th>Fairness</th>
<th>Fairness</th>
</tr>
</thead>
<tbody>
<tr>
<td>In effect, an individual composes a sense of accountability from these three judgments – injury [Would], conduct [Could] and standards [Should] are the constituent elements from which blame is built. (2001, p. 5, text in parentheses added)</td>
<td>If no one is to blame, there is no social injustice. (2001, p. 1)</td>
<td>As we have emphasized, fairness is based on accountability. Accountability, in turn, is based on three judgments-Would, Could, and Should. (2001, p. 32)</td>
</tr>
<tr>
<td>The fully interconnected chain linking these elements needs to be maintained. (2001, p. 5)</td>
<td>If either component [would, could, or should counterfactuals] fails to reach a bonding threshold, the bond is broken, and the initially accused party cannot be held accountable after all” (1998, p. 189)</td>
<td></td>
</tr>
</tbody>
</table>

**Empirical studies that cite fairness theory as support for each relationship**

| Gilliland, et al. (2001); Naquin & Kurtzberg, 2004; Mandel & Dhami; 2005 | Mikula, 2003 | Nicklin & Williams, 2009 |

**MODEL 2**

| Fairness Theory proposes conceptually separable psychological | Perhaps even if a supervisor's actions seem unfair, employees might tend to hold hostile | Would judgments reflect differences between actual and counterfactual (i.e., referent) events as two |
processes governing perceptions of impact magnitude and perceptions of accountability, much like a distinction between the amount of damage (or its severity) versus how and why it occurred. As we noted, the Would aspect of the theory concentrates on magnitude impact, whereas Could and Should concentrate on accountability. (1998, p. 181)

The Could and Should criteria affect the extent to which someone is held accountable for violating a moral norm of fairness only if both sets of requirements for guilt meet a sufficiency test…If either component fails to reach a responses in check when they perceive that the supervisor had no choice…Before responding negatively toward someone as a source of unfairness, people in essence ask whether that person had other feasible options-alternatives over which personal control could be exercised. (1998, pp.185-186)

An actual unfairness, whether distributive, procedural, or interactional, differs from fairness as the counterfactual. Distributive or procedural justice norms as counterfactuals make possible the experience of distributive or procedural injustice, interactional injustice as insensitive treatment entails sensitive treatment as the counterfactual that makes the insensitivity seem so adverse by contrast. (2001, p. 46)
bonding threshold, the bond is broken, and the initially accused party cannot be held accountable after all. (1998; p.189)

<table>
<thead>
<tr>
<th>Empirical studies that cite fairness theory as support for each relationship</th>
<th>Shaw et al., 2003; Colquitt &amp; Chertkoff, 2002</th>
<th>Horvath &amp; Andrews, 2007</th>
<th>McColl-Kennedy &amp; Sparks, 2003</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MODEL 3</strong></td>
<td>Same as Model 2</td>
<td>Again, an event's negative impact [Would] on someone's experienced well-being has no influence on responses directed toward another person, unless the former holds the latter accountable for key implications of that event…The negative implications of being laid off might seem severe to some and only mild to others. Nonetheless, the variations in</td>
<td>Same as Model 2</td>
</tr>
</tbody>
</table>
Experienced negativity would tend not to be correlated with negative responses that target management, such as calling management unfair or increasing the level of retribution to correspond with the level of negativity experienced. (1998, p. 179, text in parentheses added)

| Empirical studies that cite fairness theory as support for each relationship |  |
Table 2. Study 1 Design

<table>
<thead>
<tr>
<th>Causal Counterfactuals</th>
<th>Contrast Not Salient</th>
<th>Contrast Salient</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upward</td>
<td>Downward</td>
</tr>
<tr>
<td>Not Salient</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Salient</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Upward</td>
<td>Downward</td>
</tr>
<tr>
<td>Not Salient</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Salient</td>
<td>7</td>
<td>8</td>
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</tbody>
</table>
### Table 3. Study 1 Means and SDs

<table>
<thead>
<tr>
<th>Causal Counterfactuals</th>
<th>Contrast Not Salient</th>
<th></th>
<th></th>
<th>Contrast Salient</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Upward</td>
<td>Downward</td>
<td>Upward</td>
<td>Downward</td>
<td>Upward</td>
<td>Downward</td>
</tr>
<tr>
<td><strong>Not Salient</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Event Fairness</td>
<td>3.64 (.96)</td>
<td>3.84 (.65)</td>
<td>2.18 (.69)</td>
<td>4.71 (1.35)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoughts About Fairness</td>
<td>3.38 (1.55)</td>
<td>3.25 (1.28)</td>
<td>4.16 (.90)</td>
<td>3.90 (.96)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Salient</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Event Fairness</td>
<td>3.45 (.81)</td>
<td>4.04 (.89)</td>
<td>2.84 (.90)</td>
<td>3.91 (1.38)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoughts About Fairness</td>
<td>3.18 (1.09)</td>
<td>3.24 (1.13)</td>
<td>3.069 (1.05)</td>
<td>3.67 (1.14)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4. Study 1 – The Extent to Which Participants Thought About Fairness

<table>
<thead>
<tr>
<th>Conditions</th>
<th>Combined</th>
<th>Upward Direction</th>
<th>Downward Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast Salient</td>
<td>3.84</td>
<td>3.90</td>
<td>4.16</td>
</tr>
<tr>
<td></td>
<td>(1.15)</td>
<td>(1.01)</td>
<td>(0.90)</td>
</tr>
<tr>
<td>Contrast Not Salient</td>
<td>3.27</td>
<td>3.28</td>
<td>3.38</td>
</tr>
<tr>
<td></td>
<td>(1.04)</td>
<td>(1.12)</td>
<td>(1.16)</td>
</tr>
<tr>
<td>t-test</td>
<td>-5.82***</td>
<td>-4.62***</td>
<td>-4.08***</td>
</tr>
</tbody>
</table>
## Table 5. Correlation Table for Study 2 Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>S.D.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Supervisor OCB Intentions T2</td>
<td>3.00</td>
<td>.78</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Supervisor OCB Intentions T1</td>
<td>3.00</td>
<td>.70</td>
<td>.64**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Supervisor Entity Fairness Perceptions T2</td>
<td>3.79</td>
<td>1.37</td>
<td>.58**</td>
<td>.29**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Supervisor Entity Fairness Perceptions T1</td>
<td>3.83</td>
<td>1.02</td>
<td>.34**</td>
<td>.37**</td>
<td>.51**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Causal Counterfactuals Implicating Supervisor</td>
<td>2.7</td>
<td>1.13</td>
<td>.33**</td>
<td>.18*</td>
<td>.46**</td>
<td>.24**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Event Fairness Perceptions</td>
<td>3.66</td>
<td>1.63</td>
<td>.57**</td>
<td>.29**</td>
<td>.83**</td>
<td>.37**</td>
<td>.54**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Causal Counterfactuals Implicating Participant</td>
<td>3.64</td>
<td>.78</td>
<td>-.35**</td>
<td>-.20*</td>
<td>-.43**</td>
<td>-.21**</td>
<td>-.80**</td>
<td>-.44**</td>
<td></td>
</tr>
<tr>
<td>8. Contrast Counterfactual Direction &amp; Magnitude</td>
<td>3.43</td>
<td>1.01</td>
<td>-.28**</td>
<td>-.12</td>
<td>-.47**</td>
<td>-.05</td>
<td>-.25**</td>
<td>-.49**</td>
<td>.21**</td>
</tr>
</tbody>
</table>
Table 6. Effect of the Direction and Magnitude on Fairness Perceptions

<table>
<thead>
<tr>
<th></th>
<th>Step 1</th>
<th></th>
<th>Step 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
</tr>
<tr>
<td>Constant</td>
<td>2.88</td>
<td>.69</td>
<td>5.95</td>
<td>.75</td>
</tr>
<tr>
<td>Type of Job</td>
<td>.30</td>
<td>.43</td>
<td>.06</td>
<td>.21</td>
</tr>
<tr>
<td>Number of Fairness Surveys Initiated</td>
<td>.28</td>
<td>.28</td>
<td>.08</td>
<td>.08</td>
</tr>
<tr>
<td>Contrast Counterfactual Direction &amp; Magnitude</td>
<td>- .79</td>
<td>.11</td>
<td>-.49***</td>
<td></td>
</tr>
<tr>
<td>( R^2 )</td>
<td>0.01</td>
<td></td>
<td>0.24***</td>
<td></td>
</tr>
<tr>
<td>( \Delta R^2 )</td>
<td></td>
<td></td>
<td>.23***</td>
<td></td>
</tr>
</tbody>
</table>

Note. *** denotes significance at p < .001.
Table 7. Interaction Between Contrast and Causal Counterfactuals on Event Fairness

<table>
<thead>
<tr>
<th></th>
<th>Step 1</th>
<th></th>
<th>Step 2</th>
<th></th>
<th>Step 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>Beta</td>
</tr>
<tr>
<td>Constant</td>
<td>2.82</td>
<td>.70</td>
<td>.36</td>
<td>.72</td>
<td>5.09</td>
<td>.92</td>
</tr>
<tr>
<td>Type of Job</td>
<td>.33</td>
<td>.44</td>
<td>.06</td>
<td>.36</td>
<td>.32</td>
<td>.07</td>
</tr>
<tr>
<td>Number of Fairness Surveys Initiated</td>
<td>.28</td>
<td>.28</td>
<td>.08</td>
<td>.06</td>
<td>.21</td>
<td>.02</td>
</tr>
<tr>
<td>Contrast Direction &amp; Magnitude</td>
<td>-.63</td>
<td>.10</td>
<td>-.39***</td>
<td>-1.17</td>
<td>.21</td>
<td>-.72***</td>
</tr>
<tr>
<td>Causal Counterfactual Implicating the Participant</td>
<td>.67</td>
<td>.09</td>
<td>.47***</td>
<td>-.18</td>
<td>.31</td>
<td>-.13</td>
</tr>
<tr>
<td>Interaction Effect</td>
<td></td>
<td></td>
<td>.24</td>
<td>.08</td>
<td>.63**</td>
<td></td>
</tr>
</tbody>
</table>

R squared: .01, .46, .49
R Squared Change: .45***, .03**

Note. *** denotes significance at p < .01; *** denotes significance at p < .001.
Table 8. Interaction Between Causal Counterfactuals and Event Fairness on Entity Fairness

<table>
<thead>
<tr>
<th></th>
<th>Step 1</th>
<th></th>
<th>Step 2</th>
<th></th>
<th>Step 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
<td>β</td>
<td>B</td>
<td>SE B</td>
<td>β</td>
</tr>
<tr>
<td>Constant</td>
<td>1.22</td>
<td>.65</td>
<td></td>
<td>.81</td>
<td>.39</td>
<td></td>
</tr>
<tr>
<td>Type of Job</td>
<td>-.14</td>
<td>.33</td>
<td>-.03</td>
<td>-.26</td>
<td>.19</td>
<td>-.06</td>
</tr>
<tr>
<td>Number of Fairness Surveys Initiated</td>
<td>.28</td>
<td>.22</td>
<td>.09</td>
<td>-.02</td>
<td>.13</td>
<td>-.01</td>
</tr>
<tr>
<td>Supervisor Entity Fairness T1</td>
<td>.64</td>
<td>.10</td>
<td>.46</td>
<td>.22</td>
<td>.06</td>
<td>.15***</td>
</tr>
<tr>
<td>Event Fairness</td>
<td></td>
<td></td>
<td></td>
<td>.66</td>
<td>.04</td>
<td>.78***</td>
</tr>
<tr>
<td>Causal Counterfactual Implicating the Supervisor Interaction</td>
<td>.02</td>
<td>.06</td>
<td>.02</td>
<td>.32</td>
<td>.13</td>
<td>.26*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.08</td>
<td>.03</td>
</tr>
<tr>
<td>R squared</td>
<td>.21</td>
<td></td>
<td>.72</td>
<td></td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>R Squared Change</td>
<td></td>
<td></td>
<td></td>
<td>0.52***</td>
<td></td>
<td>0.01*</td>
</tr>
</tbody>
</table>

Note. * denotes significance at p < .05; *** denotes significance at p < .001.
Table 9. Effect of Supervisor Entity Fairness Perceptions on OCB Intentions

<table>
<thead>
<tr>
<th></th>
<th>Step 1</th>
<th>Step 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE B</td>
</tr>
<tr>
<td>Constant</td>
<td>2.22</td>
<td>.35</td>
</tr>
<tr>
<td>Type of Job</td>
<td>-.05</td>
<td>.18</td>
</tr>
<tr>
<td>Number of Fairness Surveys Initiated</td>
<td>-.12</td>
<td>.13</td>
</tr>
<tr>
<td>Supervisor Entity Fairness T1</td>
<td>.25</td>
<td>.05</td>
</tr>
<tr>
<td>Supervisor Entity Fairness T2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. *** denotes significance at p < .001.
Table 10. Mediated Moderation Analysis in Study 2

<table>
<thead>
<tr>
<th>Effects at +/- 1 SD From M of Causal Counterfactuals Implicating the Supervisor</th>
<th>Direct Effects</th>
<th>Indirect Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Unstandardized B (S.E.)</td>
<td>Unstandardized B (S.E.)</td>
</tr>
<tr>
<td>-1 SD (2.85)</td>
<td>.14 (.06)</td>
<td>.11* (.05)</td>
</tr>
<tr>
<td></td>
<td>[t = 2.36*]</td>
<td>[CI: .04, .23]</td>
</tr>
<tr>
<td>+1 SD (4.46)</td>
<td>.06 (.06)</td>
<td>.15* (.05)</td>
</tr>
<tr>
<td></td>
<td>[t = 1.05]</td>
<td>[CI: .05, .25]</td>
</tr>
<tr>
<td>Full Model</td>
<td>.02* (.01)</td>
<td>.02* (.01)</td>
</tr>
<tr>
<td></td>
<td>[CI: .003, .050]</td>
<td>[CI: .003, .050]</td>
</tr>
</tbody>
</table>

Note. * denotes significance at p < .05.
Figures

Figure 1. Conceptual Model
Figure 2. Influence of Contrast Counterfactuals on Fairness Perceptions

![Bar chart showing the influence of contrast counterfactuals on fairness perceptions. The x-axis represents 'Upward Contrast Salient', 'No Contrast Salient', and 'Downward Contrast Salient'. The y-axis represents 'Fairness Perception' ranging from 0 to 6. The chart shows a clear trend where fairness perception increases from 'Upward Contrast Salient' to 'Downward Contrast Salient'.]
Figure 3a. Interaction of Upward Contrast and Causal Counterfactuals Event Fairness
Figure 3b. Interaction of Downward Contrast and Causal Counterfactuals Event Fairness
REFERENCES


The review was conducted by using the citation indices provided by both the ISI Web of Knowledge database and Google Scholar. Each article was then coded as empirical or theoretical. The hypotheses provided by empirical investigations were further coded as supporting one of the three models illustrated in Table 1, or some alternative model linking the counterfactual, fairness, and accountability constructs. Conceptual arguments referencing fairness theory in these articles were also coded as supporting any of the models presented in Table 1 or as an alternative model. Any articles that cited another chapter in the Folger and Cropanzano (1998) book or simply cited fairness theory as an organizational justice theory without reference to any of the relationships proposed by the theory were excluded from further analysis.

In order to ensure that including the Downward, Contrast Not Salient condition, did not cause this effect, I also ran a t-test analysis with fairness perceptions as the dependent variable and the Upward, Contrast Not Salient conditions versus Upward, Contrast Salient conditions as the independent variable. Consistent with Hypothesis 2a, the results revealed that fairness perceptions were lower when an upward contrast counterfactual was salient ($M = 2.54, SD = .87$) relative to the condition in which no contrast counterfactual was salient ($M = 3.55, SD = .89$) [$t(256) = 9.13, p < .001$].

In order to ensure that including the Upward, Contrast Not Salient condition, did not cause this effect, I also ran a t-test analysis with fairness perceptions as the dependent variable and the Downward, Contrast Not Salient conditions versus Downward, Contrast Salient conditions as the independent variable. Consistent with Hypothesis 2b, the results revealed that fairness perceptions were higher when an upward contrast counterfactual was salient ($M = 4.29, SD = 1.41$) relative to the condition in which no contrast counterfactual was salient ($M = 3.95, SD = .79$) [$t(235) = -2.28, p < .05$].

It is plausible that supervisor entity fairness perceptions prior to the first fairness assessment might have influenced contrast counterfactual direction and magnitude, as well as event fairness perceptions. For one, if the supervisor caused the event, it is possible that the participant might have used supervisor entity fairness as a contrast counterfactual. In this case, entity fairness might be responsible for event fairness perceptions rather than contrast counterfactuals. In order to ensure this was not the case, I performed a supplementary analysis entering supervisor entity fairness perception prior to the first fairness assessment as a control, contrast counterfactual direction and magnitude in step 2 as the independent variable, and event fairness perceptions as the dependent variable. The results of the regression revealed that both supervisor entity fairness [$\beta = .35, S.E. = .11, p < .001$] and contrast counterfactual direction and magnitude [$\beta = -.49, S.E. = .11, p < .001$] were significantly related to event fairness perceptions. Moreover, the addition of contrast counterfactual direction and magnitude to the control variable created a significant $R^2$ change [$R^2 = .36, \Delta R^2 = .24, p < .001$]. Thus, although entity fairness was related to event fairness perceptions, contrast counterfactual direction and magnitude provided a significant additional effect on event fairness perceptions.