Through Which Glasses Do You See Justice—Rose-colored or Dark-colored?

—The Role of Affect in Justice Perception Formation

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Abstract

How individuals form justice perceptions has been a fundamental question in justice research. While most justice researchers treat justice perceptions as results of deliberate cognitive process, very few studies examined the role of affect in justice perception formation. Among these studies, most of them perceive affect as outcomes of justice; others investigating the predicting role of affect in justice perceptions were far from enough, either due to lack of solid theoretical foundation or due to the limitation of methodology. Based on the Affect Infusion Model, this dissertation focused on exploring the predicting role of affect in justice perception formation and three moderating contextual factors, including personal relevance, emotional control, and group context. A pilot study and two experimental studies, with both student sample and employee sample, were conducted. Structural equation modeling, ANOVA and regression were employed to test the hypotheses.

Results showed that people in positive affective states perceived higher distributive justice, procedural justice, interpersonal justice, and informational justice than their counterparts in negative affective states. Moreover, personal relevance moderated the relationships between affect and distributive justice and procedural justice so that the relationships above were enhanced as personal relevance increased. It is also suggested that individuals constrained the influence of their affect on procedural justice in group context, compared to the case when they make individual judgment. Surprisingly, the moderating effect of emotional control was not found as predicted. Results, implications, limitations as well as future directions were discussed.

摘 要

在組織公平的研究當中，一個最基本的問題就是人們如何形成對組織公平的感知。以往大多數的研究都認爲這個感知的過程是深思熟慮的、冷靜的認知過程，情感只是組織公平感知的結果。非常少的研究關注過情感可能影響人們對組織公平的感知。這部分研究由於缺乏系統的理論支援和資料驗證，顯得相當薄弱。本研究基於情感滲透模型（Affect Infusion Model），圍繞情感如何影響人們組織公平的感知，以及可能對這個過程產生調節作用的三個因素（即個人相關度，情緒控制，以及群體情境）做出了一系列假設。本研究通過一個預實驗和兩個主實驗，對這些假設進行了檢測。兩個主試驗的參與者分別是學生和公司成員。主要使用的統計工具包括結構方程模型、方差分析和回歸。

結果顯示，參加者的正面情感能導致更高的分配公平、程式公平、以及互動公平的感知，相反，參加者的負面情感會導致更低的分配公平、程式公平、以及互動公平的感知。個人相關程度會調節參加者的情感和分配公平、程式公平之間的關係；在個人相關程度高的情況下，上述關係會得到加強，反之則減弱。另外，在群體情境中，情感對於程式公平感知的影響減弱。情緒控制的調節作用在本研究中並未得到證實。研究結果、理論和實踐的啓示、局限性以及未來的研究方向都在最後作了充分的討論。

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1. Introduction

Justice perception has been a construct that leads to a variety of major organizational outcomes, such as organizational citizenship behavior (OCB), organizational commitment, job satisfaction and turnover (for a review, see Colquitt, Conlon, Wesson, & Porter, 2001). Given its significant impact on these organizational outcomes, organizational justice has been an important construct in the organizational behavior (OB) literature since 1960s. While the consequences of justice perception have been studied quite extensively in the OB literature, studies concerning the formation of justice perception are less systematic.

How individuals form their justice perceptions is a fundamental question in justice research. Past studies have advanced our understanding on the process of justice perception formation. Researchers argue that certain deliberative and motivated processes guide individuals' evaluations of justice (De Cremer & Van den Bos, 2007). For instance, individuals perceive the organizational procedures as fair to the extent that those procedures meet the requirement of the six principles described by Leventhal (1975). This view has advanced our understanding about how individuals form their justice perceptions, and this process is considered as cold and cognitive responses to the objective reality in a strictly rational way (Barsky & Kaplan, 2007).

However, this rational view contrasts both with our everyday subjective experience of injustice as "hot" and emotionally laden and with the emerging recognition that affect and affective tendencies play a central role in work-related social judgments (Barsky & Kaplan, 2007). The purely rational view may not be the whole truth and was complemented by later view of "bounded rationality" (Simon, 1976). However, even after this modification, the affective aspects of organizational behaviors are still

perceived to be irrational.

Though studied less in justice, affect is no doubt one of the emerging issues in organizations. Through numerous studies, it has been showed to have an impact on various constructs, including person perception, attitudes, intergroup behavior, stereotyping, self-perception, interview decisions, etc. (Brief & Weiss, 2002; Schwarz & Clore, 1983; Tanaka & Takimoto, 1997). Organization has also been described as an "arena of emotions" where the issue of affect is prevalent and deserves more attention.

Many studies have been seen to investigate the relationship between affect and justice. For one example, Mikula, Scherer and Athenstaedt (1998) found that across 37 countries, people displayed affective reactions, such as anger, shame and dissatisfaction, to injustice. Most of other studies adopted this approach as well, which is assuming the justice-emotion causal relationship, and ignored the important role of affect that can be played in people's justice perception formation. Not until recently, some scholars are beginning to treat affect as an important input in justice perception (Greenberg & Ganegoda, 2007; Barclay, Skarlicki, & Pugh, 2005). Unfortunately, there are surprisingly few studies which systematically look into the affect-related influences on the justice judgment process (De Cremer & Van den Bos, 2007; Barclay et al., 2005; Scher & Heise, 1993). The role of affect in forming organizational justice perceptions has received scant attention (Barsky & Kaplan, 2007; Haidt, 2001). Nevertheless, the emerging evidence that affect does influence individuals' justice perceptions suggests that the cold cognitive judgment of justice is no longer sufficient to explain how individuals' justice perceptions are formed, and the affect should play a role in the judgment process which has been underestimated in previous research (Forgas, 1995; Weiss & Cropanzano, 1996).

My dissertation follows this direction of studying the role of affect in the formation of justice perceptions. Based on the Affect Infusion Model (Forgas, 1995), the current

research attempts to explore the predicting role of affect in individuals' justice perception formation for those justice dimensions that are entity-based. AIM was selected to be the theoretical model of the current study because it not only predicts the simple linear relationship between affect and perceptions, but it also offers a complete framework on how and why affect influences or does not influence people's perceptions, depending on a sets of features (target, judge, and context). Briefly speaking, based on this framework, the current study argues that affect will influence individuals' justice perceptions, however, dependent on various factors such as the individual's personal relevance, ability of emotional control and the group context.

Drawing from the AIM, I make the following hypotheses about the formation of justice perceptions. First, positive affect leads to higher justice perceptions and negative affect leads to lower justice perceptions. In addition, negative affect exerts a stronger influence on individuals' justice perceptions than positive affect does. Second, individual's ability in emotional control is hypothesized to moderate the relationship between affect and justice perceptions. The rationale is that individuals with better abilities in emotional control may be less influenced by their own affect in judging the justness of organization and supervisors. Third, it is argued that the more individuals care about the outcome, procedural, and interpersonal treatment, the more their distributive justice, procedural justice, and interactional justice perceptions will be influenced by their affective states, respectively, because under the case of high relevance, the information of affective states will be processed more intensively and more likely to be incorporated into the justice judgment. Fourth, in the current study, group context is suggested to be a moderator between affect and justice perceptions so that in group context, the role of affect will be inhibited in influencing justice perceptions.

The contributions of my dissertation are five-fold. First of all, this research

contributes to the justice literature so that it shifts the focus of the justice research from the cognitive side to the affective side. It specifies and tests the role of affect in predicting individuals' justice perceptions with a solid theoretical foundation of AIM. Second, different organizational contexts will be identified under which the degree of affect infusion differs. Third, the distinction and asymmetrical effect of positive and negative affect is examined in predicting justice perceptions. This potential asymmetric phenomenon has not been systematically studied. Fourth, the experimental design supplemented the dominating methodology of cross-sectional survey and can provide strong evidence on the proposed causal relationships. Fifth, a student sample and an employee sample were examined so that the two can cross-validate each other, thus enhancing the external validity of the experimental findings from the laboratory context into the real organizational context.

In the following chapters, a literature review was reported and the theoretical rational behind the hypotheses were presented. A pilot study with a longitudinal design has been conducted to test the fundamental starting point of whether the process of justice perceptions formation is completely rational and whether the rational approach is sufficient to explain this process. Based on this preliminary evidence, two experimental studies, with a student sample and an employee sample, were conducted as the main study of my dissertation. Results were reported, followed by discussions on the findings, implications, limitations, and future directions.

2. Literature Review—Justice and Affect

In this chapter, a literature review on justice and affect was reported. This begins with an introduction to four dimensions of justice and domain of affect. The traditional approach and findings of the relationship between affect and justice perceptions was reviewed, followed by a critic on this approach. Finally there was an intense introduction to the Affect Infusion Model, which provides theoretical foundation in the current research.

2.1 The Justice Dimensions: Distributive, Procedural and Interactional Justice

With the milestone work by Adams (1965), researchers began to focus on the fairness of the decision outcome, termed distributive justice. Distributive justice is perceived to be enhanced if the outcome is allocated in accordance with explicit or implicit norms. Most extensively researched norm is equity. According to equity theory, an individual compares his or her output-input ratio with a referent other. Unequal outcome-input ratios indicate an unfair distribution of outcome which makes people feel distributive injustice. Such injustice could be rectified by altering inputs (e.g., time and effort) and outcomes (e.g., attitude).

Other norms were also covered in the literature, such as equality, needs, norm of reciprocity and norm of commitment (Leventhal, 1976). The preferences of allocation norms are determined by three sets of factors, including cultural influences, situational demands, and belief about the utility of specific distributions and procedures (Leventhal, Karuza, & Fry, 1980; Deutsch, 1975). For example, in cooperative relations in which economic productivity is a primary goal, equity rather than equality or need will be the dominant principle of distributive justice; in cooperative relations in which the fostering

or maintenance of enjoyable social relations is the common goal, equality will be the dominant principle of distributive justice; in cooperative relations in which the fostering of personal development and personal welfare is the common goal, need will be the dominant principle of distributive justice (Deutsch, 1975). Consistent with this argument, evidence showed that Chinese, emphasizing group unity and harmonious relations, prefer equality norms with in-group members and equity norms with out-group members. For Americans who care more on personal achievement and individual contribution, have the opposite pattern (Fields, Pang, & Chiu, 2000), implying that possible values could be employed as a basis on which people choose distribution norms.

More recent work has focused on the process of allocation, termed procedural justice. Thibaut and Walker (1975) raised the concept of procedural justice from observation of courtroom settings and found that both process and decision control were valued much in the courtrooms. Leventhal and his colleagues were among the first to apply this concept to organizational settings (Leventhal, 1976; Leventhal, Karuza, & Fry, 1980) and greatly broadened the scope of organizational justice. They argued that higher procedural fairness is likely to be achieved when procedures are adhering to some criteria, such as consistency, lack of bias, correctability, representation, accuracy, and ethicality (Leventhal, 1980; Leventhal, Karuza, & Fry, 1980). People are more likely to perceive just if they are treated with fair procedures (De Cremer & Tyler, 2007).

In addition, people's procedural justice judgments are likely to be higher if they are given voice and control. Voice means being given opportunities to share opinions, comments and suggestions before, during or even after the allocation decision is made. Voice can be categorized to either instrumental voice or non-instrumental voice, according to people's belief whether their voice can finally affect the results. Both instrumental and non-instrumental voice was related to satisfaction with the appraisal, but

only non-instrumental voice had an impact on attitudes toward the manager (Korsgaard & Roberson, 1995). Voice is especially important for in-group members than out-group members (Van Prooijen, Van den Bos, & Wilke, 2004). Greenberg and Folger (1983) provided additional perspectives in looking at the procedural justice' effect in groups and organizations, such as over-justification effect.

Control includes both process control and outcome control. The rationale behind voice and control is generally two-folded. On the one hand, through voice and control, people can maximize their own self-interest by giving some input to affect the allocation outcome, directly or indirectly. On the other hand, even when the final decision will not be affected, people feel respected and valued through non-instrumental voice and process control.

One of the prominent findings in literature is the fair process effect. That is, the outcome severity can be mitigated by the presence of fair procedures. For example, people showed higher satisfaction with the unfavorable outcome if they are given voice than they are not given voice. This seems that procedural justice reduces the effect of distributive injustice (e.g., Field et al., 2000; Folger, Rosenfield, Grove, & Corkran, 1979). There are four models that can account for this interactional effect between procedural justice and distributive justice: referent cognition theory, instrumental theory, group value model, and attributional models (Konovsky, 2000). While different, all these four explanations share one important commonality (Brockner & Wiesenfeld, 1996). That is, when a negative event happens, individuals will initiate sense-making activity to seek information about why such event happens. This renders them more vulnerable to external information and clues, including the procedures. Thus when they receive fair procedures, their sensitivity of unfavorable outcome will be reduced and manifested by the interactional effect of procedural justice and distributive justice.

The more recent wave of justice concerns with the enactment of procedures, termed interactional justice (Bies & Moag, 1986). Interactional justice is fostered when decision makers treat people with respect and dignity and also provide necessary information and explanation. While procedures are considered as exchanges between employees and organizations, interpersonal interactions are treated as encounters on a day-to-day basis between an individual and the other, usually referred to as supervisors and subordinates in the organizational settings. Though many studies assumed or emphasized the employees' role as recipients in the encounters, this is not always the case. Since employees are one party of the interaction, they should not be considered as passive receivers; rather, they can also actively influence the way how others treat them. Some studies find that subordinate charisma is one of the predictors of interpersonal justice through emotional bonds (Scott, Colquitt, & Zapata-Phelan, 2007).

Two aspects of interactional justice have been identified, namely interpersonal justice and informational justice (Greenberg, 1993). Specifically, interpersonal justice represents the extent to which individuals feel that they are treated with respect and dignity and informational justice refers to the adequacy of the information and explanation provided by supervisors to justify the enactment of procedures. These two dimensions were examined empirically as distinct construct by Colquitt (2001).

The above four types of justice are found to lead to different types of organizational outcomes. The agent-system (two-factor) model (Bies & Moag, 1986; Sweeney & McFarlin, 1993) suggested that distributive justice focusing on the decision outcome is more related to outcome satisfaction; procedural justice focusing on the decision process is more related to outcome variables toward the system, such as organizational commitment, organizational citizenship behavior, job satisfaction, and compliance (e.g., Moorman, Blakely, & Niehoff, 1998; Sweeney & McFarlin, 1993); interactional justice

focusing on the decision enactment is more related to the variables toward the decision making agent, such as evaluation of the supervisor and leader-member exchange quality. There is also evidence showing that interactional justice can effectively buffer effects of underpayment by providing social support from the supervisors (Greenberg, 2006). Some studies also test the effect of interpersonal justice and informational justice separately and found that they each have unique influence on different effects (Coquitt, 2001). Specifically, interpersonal justice will be more strongly related to evaluation of the supervisor and informational justice will more strongly indicate the trustworthiness of supervisor and increase status judgments and collective esteem. Of these justice dimensions, procedural justice is likely to influence distributive justice over time, but not vice versa (Robbins et al., 2000).

2.2 Domain of Affect

Two kinds of affect can be identified in the affect literature, namely trait affect and state affect, depending on the duration. Trait affect, also known as core affect or temperament (Bates, 2000), is perceived as comprising "the most elementary consciously accessible affective feelings that need not be directed at anything" (Russell & Barrett, 1999, p. 806). Trait affect is generally perceived to be stable and hard to change across situations and time. Two trait affects have been identified as positive affectivity and negative affectivity (Olekalns & Erwin,1998). Compared to people with low positive affectivity, those with high positive affectivity are more likely to experience positive moods and emotions and feel positive. In the same vein, compared to people with low negative affectivity, those with high negative affectivity are more likely to experience negative mood and emotions, feel negative, and much easier to be irritated. In terms of state affect, it means current moods and emotions, which are much more sensitive to

change, compared with trait affect. In the current study, state affect will be the research focus and trait affect, including positive affectivity and negative affectivity, will be used as control variables. Therefore, without any special explanation here forward, affect and affective states will be used interchangeably in the current research to refer to the state affect.

In general, affect, defined as a subjective feeling state, is used as a generic label to refer to both moods and emotions (Mayer, 1986). While moods are "low-intensity, diffuse and relatively enduring affective states without a salient antecedent cause and therefore little cognitive content", emotions are "more intense, short-lived and usually have a definite cause and clear cognitive content" (Forgas, 1992). The current study would not differentiate between moods and emotions. Rather, affect will be treated as a whole to be research focus.

Moreover, although some studies treat positive and negative affect as two poles of a unitary construct, evidence shows that positive and negative affect are independent of each other and these two are conceptually distinct constructs (Diener & Emmons, 1985; George & Brief, 1996; Isen & Baron, 1991). In the current research, positive and negative affect are treated as two conceptually independent variables rather than two poles of a construct. Following are several theoretical considerations for this.

Both the affiliation and conflict literature suggests that distressing life events elicit more social response in individuals (Degoey 2000) and negative events generally evoke stronger cognitive and emotional responses than neutral or positive events do (Taylor, 1991). Moreover, negative events also evoke more attempts at minimizing the emotional impact of these events. Other studies showed that positive affect seems to generate loose, creative, and heuristic processing strategies (Fielder, 1988), whereas negative affect recruits more careful and substantive processing style (Forgas & Bower, 1987). Van den

Bos (2003) suggested that negative affect has a stronger impact on people's justice perceptions than positive affect with the results that negative affect differed more strongly from the control condition than did positive affect. It is also found that only unpleasant affective states may motivate persons to seek explanations, whereas persons in pleasant affective states may not. Similar conclusions were obtained in several other studies that negative affect alerts individuals to pay more attention such that it influences their justice perceptions more than positive affect (Arkin, Gleason, & Johnston, 1976; Schwarz, 1988, 1990; Schwarz & Clore, 1983; Sinclair, 1988; O'Malley & Davies, 1984; Weiss & Cropanzano, 1996).

Positive and negative affect also differ in their length of effect. Generally speaking, the influence of negative affect will be durable than positive affect. For example, in his classic study, Hersey (1932) using a repeated measures design with a small group of skilled workers, observed, among many other things, a clear relationship between daily affect levels and daily performance levels as well as considerable influence of workers' emotional lives on their work behaviors. Foregoing analysis has offered definite proof that productivity in the long run suffers when workers are gripped by negative emotions. Even the most controlled or combative person cannot be free from the influence of his negative emotions, though he may counteract their power to some extent. Similar results are also found in other studies (Venkatesh & Speier, 1999) that the effect of positive affect tends to be short-term and the influence of negative affect tends to be long-term.

Affect has been showed to be associated with many constructs in psychology studies, such as person perception, attitudes, partner choice, etc. (Brief & Weiss, 2002; Schwarz & Clore, 1983; Tanaka & Takimoto, 1997). For example, when individuals are in positive affect, they are more likely to form partnership with more capable people to achieve high quality performance; when they are in negative affect, they are more inclined to choose

partners with similar level of capability, in order to sustain their self-esteem.

2.3 Traditional Rational Approach—Justice Perceptions and Affective Reactions

One of the most fundamental questions in justice literature is how individuals form their justice perceptions because justice is subjective in the beholders' eyes. The justice perception depends on the subjective perception of the individuals rather than the objective reality. While the objective reality will certainly have effect on individual perceptions, it is not the only cause, because even under the same objective reality, individuals may differ in their perceptions. Thus, how individuals construct their justice perceptions is an important and challenging question in justice research.

There has been an unresolved debate between rationalist and intuitionist models of moral judgments for a long time (Haidt, 2001; Van den Bos, 2003), which is also called as a debate between the role of rational-cognitive process versus subjective-affective elements in justice perception formation. Research on justice judgment has been dominated by the rationalist models, in which the justice perceptions are thought to be the results of rational reasoning. Williams (1967, p. 69) considered the rationalist approach to be "the power of a prior reason to grasp substantial truths about the world". It is argued that the justice perceptions are derived from a series of reasoning processes and reflections (Turiel, 1983).

For example, according to Adams (1965), individuals perceive an outcome as fair to the extent that their outputs are paid proportionate to their inputs. That is, in order to make an assessment of distributive justice, individuals calculate their output to input ratio and compare that with the ratio of others. Leventhal (1976) has proposed six rules for fair procedures including a) consistency rule, which means it is necessary to apply similar procedures over time to all potential recipients of reward and give special advantage to

none, b) bias-suppression rule which dictates that personal self-interest and blind allegiance to narrow preconceptions should be prevented in the allocation process, c) accuracy rule which prescribes that the allocation process should be based on as much accurate information as possible, d) correctability rule which means that opportunities must exist to modify and reverse decisions made at various points in the allocation process, e) representativeness rule which refers to that the allocation process should reflect the basic concerns, values, and outlook of important subgroups in the population affected by the allocation process, and f) ethicality rule which dictates that the procedures should be compatible with the fundamental moral and ethical values accepted by the individuals affected by the allocation process. In other words, individuals process a variety of information and weigh them before making a judgment in a rational way.

Under the guidance of this rational approach, affect has been studied as reactions, rather than input, to justice perceptions in justice research. It is because according to this perspective, a rational person can and does think without the so-called "noise" of his or her affect. Affect is not a new topic since a variety of researchers have provided insights on the emotions and moods as the results of injustice. Homan (1961) and Adams (1965) both noted that distributive injustice could lead to the experience of anger and guilt. Unjust procedures, signaling a threat to basic or individuals within groups or organizations, are also a source of anger and dislike (Lind & Tyler, 1988). Weiss and Cropanzano (1996) paid attention to how employees experienced in the workplace. They noted that organizational events are proximal causes of affective reactions. In this sense, justice events in organizations can cause employees to experience either happy or unhappy experience, which further influences their job attitudes and affect-driven behaviors. Another comprehensive study by Mikula and his colleagues (1998) investigated the relationship between emotions and injustice across 37 countries and

found that the following emotions were most associated with injustice, such as anger, disgust, sadness, fear, guilt, and shame.

Such findings were cross-validated in many organizational instances, such as contract violations (Conway & Briner, 2002), and layoff (Paterson & Hartel, 2002). Not only did the layoffs suffer from anger, frustration, anxiety, even the survivors may experience the negative affect like shock, anger, empathy, fear and so on (Ryan & Macky, 1998). On the contrary, justice is found to trigger positive affective reactions, such as pride, happiness, and enthusiasm. This evidence came from a variety of studies (e.g., Matheny & Smollan, 2005; Williams, 1999; Conway & Briner, 2002).

2.4 Critic and an Alternative—Affect as an Input of Justice Perceptions

While the rational models have been the dominating perspective in the justice perception literature, some insufficiencies have been pointed out by the following models, namely, dual process model and intuitionist model.

The question of how people think and how they form judgments has played a significant role in social psychology. There are basically two positions in literature. On the one hand, people are described as naive psychologists who invest their time and effort to engage in deliberative and systematic thinking (Vaughan & Hogg, 2005). On the other hand, they are sometimes cognitive misers (Fiske & Taylor, 1991) that they process information in unsystematic way, for instance, by relying on heuristics. Brewer (1988) proposed a dual process model to bridge these two positions and reconcile the inconsistent findings. He argues that under different conditions and circumstances individuals are likely to act as naive psychologist or cognitive misers. Systematic processing requires sufficient processing motivation and processing capacity while heuristic processing is more likely when they lack processing motivation or processing

capacity. That is to say, the rational models should not be the only way to think. There are two different thinking processes consisting of an implicit (automatic), unconscious process and an explicit (controlled), conscious process.

Chaiken (1980)'s heuristic-systematic model is one of the dual process models and is used widely in social psychology. It has been used in persuasion (Mackie & Worth, 1989), marketing and advertising (Belch & Belch, 2004). The findings are quite consistent in the way that heuristics will be used as long as they satisfy our need to be confident in our attitude, decision, and judgment. When we lack such confidence we will resort to more effortful, systematic, deliberative information processing. These dual process models are valuable in understanding the standing point in the current study. That is, compared to the single processing assumption which proposes people process information in the same way under all conditions, there should be other processing strategies that can explain people's thinking and judgment making. This is why I suspect the traditional and dominant rational perspective in justice research is insufficient for our understanding on how people form their justice perceptions.

However, Chaiken's model has had very limited influence on understanding the process how individuals form their justice perceptions, since the dominant effort in justice research has been put on exploring the reasoning process underlying the justice perceptions.

Meanwhile, it is almost impossible to argue that justice judgment is a product of pure rational thinking, because justice perception is strongly related with moral standards, which are different from rationality. In fact, one can even argue that justice perception is the results of moral judgment. Unlike other organizational attitudes such as job satisfaction or organizational commitment, justice involves some moral denotation that differ much from conscious reasoning and draws attention to the role of moral intuitions.

It is consistent with the findings that people are likely to judge whether events are fair or unfair against the yardstick of their internalized moral values and act for pure morality (Skitka, 2002; Leung & Tong, 2003). People have a sense of morality and concern for the well-being of others, and morality often constitutes a major force behind people's desire to the pursuit of justice. These moral judgments are based on a set of standards, derived from ethical orientation and moral mandates (Cropanzano, & Rupp, 2002), which are echoed with what Leung and Tong (2003) referred to as social norms and personal norms. The heavy involvement of moral judgments clearly shows that a pure rationalist reasoning perspective is insufficient and inadequate to explain individuals' justice perceptions formation.

Besides the arguments above, folk wisdom and other literature in social cognition noted that intuition will shape our justice judgments. One example of such study is the intuitionist model (Haidt, 2001). According to this model, when people make judgments they do so not by a rationalist reasoning process but rather by a process akin to intuition (Harrison, 1967). That is, the intuitionist model argues that the intuitions come first and it causes the reasoning to happen. The central claim of the intuitionist model is that "moral judgment is caused by quick moral intuitions and is followed (when needed) by slow, ex post facto moral reasoning" (Haidt, 2001). These moral judgments involve a variety of human values such as fairness and honesty. For a more vivid metaphor, Haidt (2001) used the "emotional dog and its rational tail" to describe the relationship between the rationalist model and the intuitionist model. He indicated that when making a moral judgment, one becomes a lawyer trying to build a case rather than a judge searching for the truth. That is, individuals use their quick intuitions to make a judgment first and then try to prove that judgment by rational reasoning. Based on this model, it is the intuition that causes the justice perceptions rather than the reverse.

Arguments above, employing different theoretical models, provide plenty of evidence that justice researchers investigating the process of justice perception formation should not limit themselves to the dominating rationalist approach. Though powerful, this approach does suffer from its insufficiencies that should be supplemented by other approaches in order to achieve a more complete picture of how individuals form their justice perceptions. Such a supplement is affective approach. Researchers have hinted that affect might be a better predictor of individuals' moral judgments, such as justice, than their claims of the consequences of an event (Haidt, Koller, & Dias, 1993).

As we have been arguing in the above, the affect issues may be pivotal for a better understanding of organizational justice perceptions formation. This may pave a way for a new area in justice research. First of all, evidence has shown that most of our behaviors and judgments are in fact made automatically, without intention, effort, or awareness of reasoning process (Greenwald & Banaji, 1995). In addition, attitude and judgment formation can better be described as a set of automatic process than a process of reasoning and deliberation about a person or an event (Haidt, 2001). This is consistent with the principle of least effort (Chaiken, 1987) which argued that due to the limitation of cognitive resources, it is very likely for people to avoid the intensive and deliberative information processing. The heuristics, such as stereotypes and categorizations provide easy cognitive shortcuts for individuals to make a judgment. People are supposed to use this intuitive processing as often as they can, unless there is a special need for them to use the deliberative reasoning, which uses much cognitive capacity. As a result, it is reasonable to suspect the standing point of the rationalist models and start considering other alternative models to look into the moral judgment formation, such as justice perceptions.

Second, justice has been shown to be closely linked to affective factors (Degoey,

2000), such as guilt, anger and happiness. It is never a "cold" phenomenon without "hot" affective nature. Dating back to Adams (1965)'s seminal work, it is found that underpayment led people to feel angry while overpayment led people to feel guilty. According to the relative deprivation theories, when people experience being deprived of something to which they believe themselves to be entitled to have, they will feel discontent and stress (Folger, 1986) . Mikula and colleagues (1998) found in a study of 37 countries that anger-producing events were most frequently seen as being unfair. It is quite clear that the feeling of injustice was associated with negative affective experiences such as resentment, outrage, insulation, disgust, sadness, fear, and feelings of revengeful actions (Bies & Trip, 1996; Mikula, Scherer & Athensteadt, 1998).

Although many findings have been generally depicted as a causal sequence from the justice perceptions to the affective responses, a re-emerging recognition is that affect plays a significant role in people's justice experience and subsequent justice perception formation. There is evidence suggesting that affective reactions to situations, such as unjust events, can occur very quickly and then rapidly trigger associated cognitions and attitudes. Although this is still a debate in research as we showed above (Zajonc, 1980), what can be concluded is that the arousal of affect may occur before cognitive awareness, and that under many circumstances affect arise at least hand-in-hand with cognitive processes (Degoey, 2000). Therefore, more and more evidence has showed the strong link between affect and justice perceptions, and psychological research have pointed out the possibility to explore the role of affect in predicting and leading to the justice perception formation.

Third, given that justice perceptions may be made automatically and closely related to the affective factors, it appears that justice perceptions can be seen as outcomes of automatic process, intuition, and feelings. That means the arousals in people's feelings

are the causes of justice perceptions. Evidence showed that individuals only feel unjust when affective arousal occurred; otherwise, when individuals experience objectively unfair event but they are not affectively aroused, they will not feel unfair (De Cremer & Van den Bos, 2007; Scher & Heise, 1993). That is to say, affect is a crucial element in people's justice perceptions formation. If justice-related affect is absent, no evaluation of justice will be made. Therefore, understanding the "affective logic" underlying decision making is fundamental to explain the "psychology of justice" in individuals (Greenberg & Ganegoda, 2007). In sum, affect plays an important role in individuals' formation of justice perceptions but has been largely under-researched. Researchers pointed out that organizational research systematically investigating affect as antecedents of fairness judgments would be novel and beneficial (Barsky & Kaplan, 2007).

An unresolved conceptual issue is whether affect should be treated as part of the cognitive representational system or should be seen as an entirely separate mental faculty (Fielder & Forgas, 1988; Hilgard, 1980). Lazarus (1984) argued that the validity of this position depends on whether one defines the domain of cognition broadly. If cognition is defined broadly enough, affect will be treated as part of the cognitive system, while these two should be considered as two different and separate systems if cognition is defined in a narrower way. The relationship between cognition and affect is not within the discussion of the current study. This study only focuses on the influence of affect in individuals' justice perceptions formation. However, following the framework of the dual-process system, it seems that separating cognitive and affective systems may facilitate our understanding of the processing systems since these two are different in many ways as we argued above.

The current research will base on the theoretical framework of the affect infusion model (AIM), which is an encompassing theory that links previous explanations in terms

of both cognition and affect, and specifies when, how and why they may or may not operate. It seeks to define the boundary conditions and link theoretical explanations in terms of single theoretical principle of process dependence.

Due to the complex, constructive nature of social judgments which involve both the cognitive and affective processes, it is crucial to have a theory that can describe both cognition and affect in the judgmental process. With this consideration, the Affect Infusion Model (Forgas, 1995) may be particularly useful because it offers an integrative theory to deal with the roles of cognition and affect in human judgment.

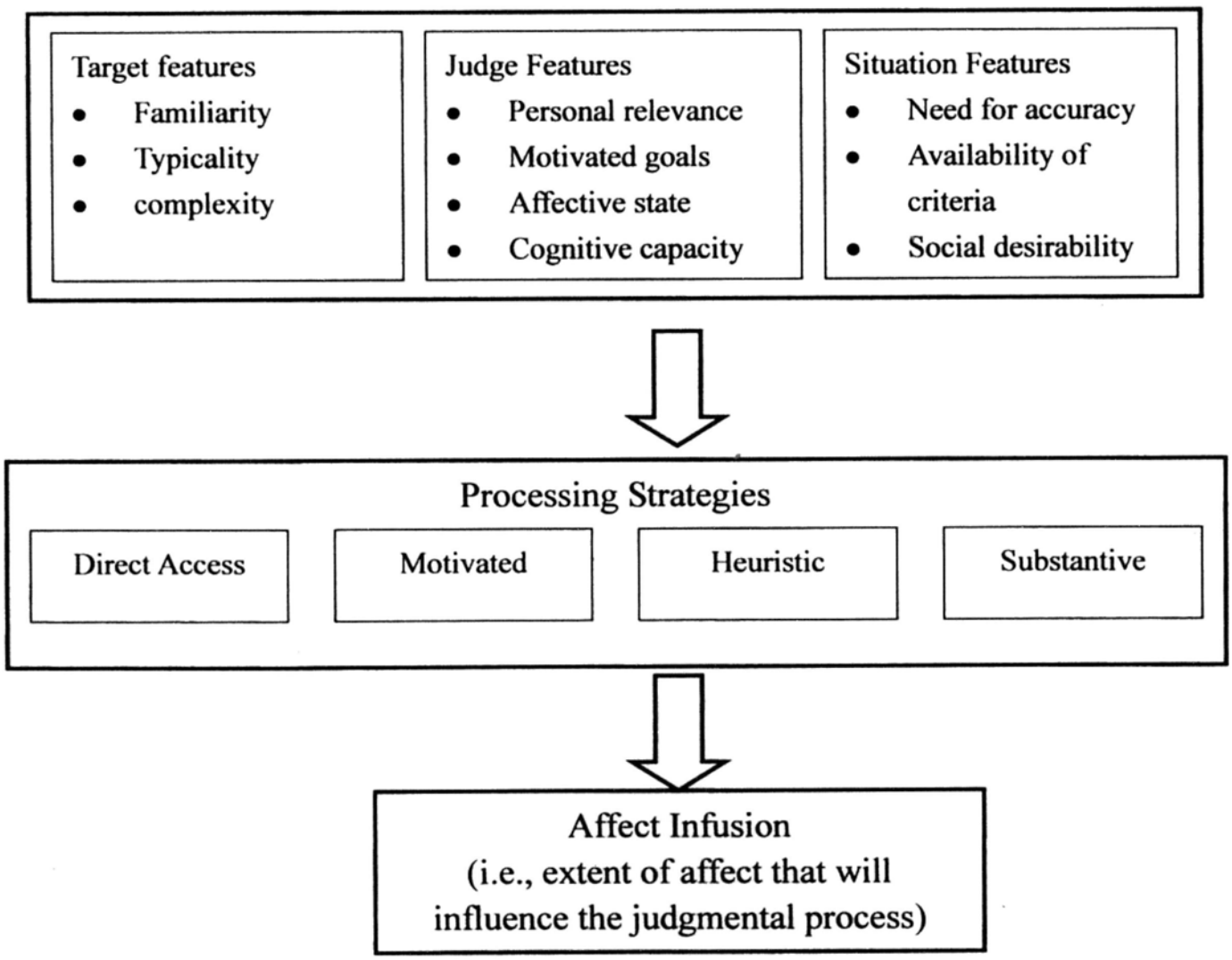
2.5 Overview of the AIM

The AIM model attempts to describe how affect is infused into human judgmental process. According to this model, affect infusion is defined as "the process whereby affective loaded information exerts an influence on and becomes incorporated into the judgmental process, entering into the judge's deliberations and eventually coloring the judgmental outcome" (Forgas, 1995). The extent to which affect is infused into the judgmental process will differ depending on the strategies that individuals used to make the judgment. The AIM identifies four alternative judgmental strategies, namely, direct access processing, motivated processing, heuristic processing, and substantive processing (Forgas, 1995). These four processing strategies will determine whether and to what extent the judgments will be influenced by affect. Briefly speaking, the first two strategies offer little opportunity for affect to influence judgment and the other two strategies allow more chance for the affect to take effect. I will discuss these four strategies in more details later. Figure 1 presented the basic elements of the AIM. Essentially, the model argues that features of the target being judged, characteristics of the judge and some situational factors will affect the judgmental strategies adopted by the

judge and the strategy will then determine the extent of influence of affect in the judgmental process.

The most interesting part of AIM is that it seeks to account for not only the instances in which affect influences judgment, but it can also explain situations in which individuals' judgment is uninfluenced by the prevailing affective state. According to AIM, affect is unlikely to influence judgments when direct access or motivated processing are adopted to make judgment. On the contrary, the judgment will have a mood-congruent effect when heuristic or substantive processing strategies are used.

Figure 1 The Affect Infusion Model



In the two strategies that affect can influence judgment, the AIM model identifies two alternative mechanisms concerning the role of affect. These mechanisms are affect-priming for substantive processing and affect-as-information for heuristic processing. Both mechanisms can produce affect-congruent effect on justice perceptions. It is worth noting that these mechanisms present complementary rather than conflicting avenues of affect infusion. In the affect-as-information mechanism, people may ask themselves "how do I feel about this?" and their feelings over the event will be used as information for them to make justice perceptions. This argument concerning a direct effect of affect on judgment is consistent with previous research on heuristics and attribution. According to Chaiken's (1980) heuristic-systematic model (HSM), individuals use cognitive shortcuts (i.e., heuristics) when individuals are not motivated to attend to a message and when individuals are facing ambiguity about the situation. These heuristic cues will anchor the interpretation of subsequent information, which is typically biased towards the direction of the heuristic cues. That is to say, when they feel good, they are more likely to perceive higher justice and when they feel bad, they are less likely to perceive justice. In a similar vein, the attribution theories also argue that when people feel bad, they will initiate activities to find a reason for their bad mood. It is likely that people may think it is the injustice that caused their bad mood and therefore perceive less justice. Both the heuristic and attribution explanations can account for the affect-as-information mechanism of affect.

Comparing the affect-as-information mechanism, affect-priming is less direct and more physiological and related to the memory retrieval. It suggests that affect can indirectly influence our judgments by facilitating access to some related information through selective attention, selective encoding, selective retrieval and associations and interpretations. For example, when individuals are in good mood, they are more likely to

pay attention to the just procedures and pleasant interpersonal relationships with their supervisors; to learn and encode more information that may lead to higher justice perceptions; to remind quickly of the information of how the organization and supervisor have treated them in a fair way; to interpret the event and encounters in a positive way rather than a negative way (Bower, 1991). Affect-priming facilitates the affect to be most likely to take effect, however, only when the individuals are using the substantive processing strategy.

With the above understanding of the essential elements of the AIM model, I will discuss its assumptions and the four strategies in more details in the following paragraphs.

2.5.1 Assumptions of AIM

The AIM model involves two major assumptions about the nature of social judgments: process mediation and effort minimization (Forgas, 1995). First of all, the AIM assumes that the nature and content of mood effect is largely dependent on which of the four kinds of processing strategies is adopted. That is, whether and to what extent the judgment is influenced by affect is determined by the information processing strategy. A counterintuitive prediction of AIM is that if the information is substantively processed, it is more likely that the information of affect will be processed and taken into consideration by the judge, because judges need to process various types of information in order to make a judgment and this open the door for affect to be taken into account.

This multi-process framework is in contrast to the single-process assumption suggested by classical information-processing models in cognitive research, the shortcomings of which have been pointed out in the former chapter. Briefly speaking, the single-process approach assumes that there is a cognitive mechanism functions in a

robust, universal and invariant way. In the contrary, the multi-process theories are more realistic, including the dual process theories (e.g., Chaiken, 1980) I introduced before. And the multi-process framework the AIM proposed is within this trend of research development.

The second assumption of AIM is effort minimization. That is, judges are inclined to adopt the simplest and least effortful processing strategy as long as it satisfies the minimal contextual requirements. Because people have limited cognitive resources, simple processing strategy is generally used unless there is a special need to engage in systematic processing (Simon, 1967). This assumption is further backed up by the other arguments in psychology. It is suggested that "the reason we selectively attend to some cues [rather than all of them] is often attributed to inadequate channel capacity or to our inability to process all sensory cues simultaneously" (Solso, 1988: 89). In other words, due to the limited cognitive capacity, it is not likely that people tender to all information around them in order to form justice perceptions. Rather, they are more likely to engage in simple process strategies which require less cognitive capacity.

Evidence above has provided much support to the validity of these two assumptions which suggest that they are reasonable to be adopted by various decision making and judgment models.

2.5.2 The Four Processing Strategies

The four processing strategies are the core part of the AIM model because they determine the role of affect in the judgment. These four strategies can be categorized into two classes: low affect infusion strategies including the direct access strategy and motivated strategy; high affect infusion strategies including the heuristic strategy and the substantive strategy. The extent of affect infusion increase along from the direct access

strategy, motivated strategy, and heuristic strategy to substantive strategy. The former two strategies involve little affect infusion while the latter two are open to affect infusion to take place.

The direct access strategy is usually the simplest method of producing a judgment and individuals use this strategy when there is no need for constructive elaboration. It involves little or no constructive evaluation, and the strongly cued retrieval of an existing crystallized judgment is likely to be quite robust and resistant to affective distortion (Fielder, 1988; Swann, 1992). This processing happens when the target is well known or familiar and has highly prototypical features that there are no strong cognitive, affective, or motivated forces requiring more elaborate processing. For example, Srull (1983, 1984) found that when making a judgment on a familiar product, customers would not be influenced much by their affect. This is because facing familiar targets individuals usually have a ready answer and response which does not need too much cognitive elaboration. Thus there is little room for affect to take effect on the judgment.

Similarly, the motivated processing happens when there are strong and specific motivated pressures to achieve a particular judgmental outcome. It is guided by a prior motivated goal and also used to achieve mood maintenance as well as mood repair (Erber & Erber, 1994). It is expected that when people have a strong motivation for mood control, affect will have little influence on individuals' judgments. For example, it has been documented that individuals' life satisfaction and well-being will be enhanced in sunny days and will be lowered in the rainy days. However, this effect vanished when the individuals were reminded and told to be aware of the influence of weather. This is so because individuals adopted motivated processing strategy to control the influence of affect (Schwarz & Clore, 1983).

For another example, individuals care about whether they are treated in a fair way or

not. Moreover, they also concerns much about whether the important reference groups receive appropriate treatment and resources, such as their teams. It is natural to suppose that when people think they are not treated fairly their negative affect will be aroused and they feel angry, unhappy and discontent as previous research has demonstrated. But when they are strongly identified with their teams, they will be motivated to care more about the team's overall well-being rather than their own. Therefore if the team receives fair treatment, the individuals will feel fair (Wenzel, 2000, 2004). In this case, the individuals adopted a motivated processing strategy and the effect of negative affect due to their own unjust treatment will be mitigated by their strong motivation to care about the overall well-being of the whole team.

On the contrary, two other strategies, heuristic and substantive, are more open ended and constructive, allowing greater influence of affect infusion to take place. Affect will have affect-congruent effect on individuals' justice perceptions during heuristic and substantive processing. That is to say, positive affect is likely to lead to higher justice perceptions and negative affect is likely to result in lower justice perceptions. Again, affect is unlikely to influence individuals' justice judgments in a mood-congruent way during the direct access or motivated processing.

The heuristic processing is most likely to happen when the target is simpler or highly typical, the personal relevance of the judgment is low, there are no specific motivated objectives, the judge has limited cognitive capacity, and the situation does not demand accuracy or detailed consideration. This is consistent with the principle of least effort (Chaiken, 1987) that people are inclined to choose the solution which costs least effort. Consistent with this argument, some studies have offered evidence that affect is sometimes used as heuristic to infer judgment. This is also known as the affect-as-information mechanism so that affect leads people to substitute information

during their judgment. One situation of this processing is in the information-uncertain conditions (Van den Bos, 2003). In such conditions, people may construct judgments by relying on how they feel about the events they have encountered so that perceptions may be strongly influenced by the affect information. This argument still holds even when the affective states have no logical relationship with the justice judgments they are constructing, such as weather. Forgas and Moylan (1987) conducted a street survey by approaching individuals after they see happy or sad movies. Individuals were asked about their opinions about some social issues, political figures and their life satisfaction. It is found that participants seeing happy movies made significantly more positive judgments and higher ratings of life satisfaction than those seeing bad movies. This is compatible with the four-process framework of AIM since in this scenario, those participants use their feelings derived from movies as information to make judgments on the issues with which have few personal relevance.

Affect can play a major role in substantive processing through its selective influence on the kind of information used in computing a judgment (Forgas, 1992). It mostly happens when the target is complex or atypical and the judge has no specific motivation to pursue, has adequate cognitive capacity, and is motivated to be accurate, possibly because of explicit or implicit situational demands. It is worth noting that here the motivation "to be accurate" is different from specific motivation and should not be confused with the motivated processing strategy. Specific motivation means that the judge has a particular specific outcome in mind that will guide their decision, so they do not process in an open, constructive manner. In contrast, motivation to be accurate implies no particular outcome, just trying to get it right, which does increase the chance of open processing and affect infusion. So the key is, specific motivation means having an outcome in mind, but accuracy does not guide judgments in any predetermined

direction.

The mechanism underlying this processing strategy is referred to affect-as-priming. It has been demonstrated that affect can make certain aspects of the decision making process more salient than others (Bower, 1991) and can influence the way people communicate and express the affective stimuli (Barsade, 2002), especially for those with a negative nature. As mentioned before, affect influenced individuals' judgment through retrieval system when the substantive processing strategy is adopted. That is to say, positive things will be more likely to be recalled when the judges are in good mood than in bad mood (Forgas, Bower, & Krantz, 1984). In personnel selection, interviewers who are in good mood are more likely to give higher ratings and make more favorable personnel decisions than those who are in bad mood (Baron, 1987). One possible reason is that interviewers are motivated to make an accurate judgment and as such, those in good mood are more likely to recall the positive performance of the interviewees so that it will be consistent with their mood. Similarly, those in bad mood are more likely to recall the negative performance of the interviewees. For both types of interviewers, they will perceive themselves as trying to make an accurate judgment.

2.5.3 Factors Determining Processing Strategies

Previous research has explored several contextual or dispositional factors that will influence the effect of affective states in people's judgment. Hersey (1932), studying the relationship between emotions and performance, proposed four sets of factors that may contribute to the differential role of affect, such as the emotional response tendency, the intensity of emotional response, emotional control, and the nature of emotions. Information uncertainty is also showed to moderate the effect of affective states on justice perceptions. It is because people may substitute one type of justice information for

another to avoid uncertainty about whether the event was just, allowing affect to take place as a source of information (Van den Bos, 2003), in that temporary affect may serve as information used by people as a judgment-simplifying heuristic device. Other contextual factors that have been studied include whether individuals could attribute their feelings to external sources or not (Schwarz & Clore, 1983), group affective tone (Brief & Weiss, 2002), event characteristics (Forgas, 1995).

Given the findings listed above, the AIM made a much more systematic categorization on the variables that determine the four processing strategies. The AIM predicts affect infusion to be highly sensitive to contextual variables that can influence processing strategies. The major contribution of the AIM to our understanding of behavior regulation and inhibition is that it specifically links affect infusion to different cognitive processing strategies and can account for the presence or absence of affect infusion into behaviors and behavior inhibition (Forgas & Vargas, 1998). The nature and extent of mood effects on judgments largely depend on what kind of processing strategy is adopted by the judge. That advances our previous understanding of the differential role of affect because affect does not necessarily take effect in all circumstances. In contrast, it influences individuals' judgments under some conditions rather than others; it infuses into individuals' perceptions more in some contexts than in others. These predictions are different from our folk wisdom and previous theories and can advance our understanding of the role of affect in influencing people's organizational judgments. It will be fruitful to explore the conditions under which affect takes effect or not, and under which affect infuses more or less. Investigation of such conditions within the contexts of organizations will be beneficial for our understanding of how affect influences our important organizational behaviors.

According to the AIM, there are three categories of variables that will determine the

processing choices. They are target features, judge features, and situation features. That is to say, the features of target (familiarity, typicality, and complexity), judge (personal relevance, motivated goals, affective state, and cognitive capacity), and situation (need for accuracy, availability of criteria, and social desirability) will determine which processing strategy will be used. And this in turn will decide how much the judgment will be influenced by affect.

The AIM model proposes that all things being equal, judgments that are personally relevant are more likely to be processed substantively (Forgas, 1995). In contrast, the lack of personal relevance is more likely to invoke strategies of less affect infusion, such as direct access and heuristics processing strategies. This argument is consistent with the findings in previous social psychology research. Raven and Rubin (1976) argued that when the justice event is highly relevant to an individual, either by directly experiencing the event or by the importance of the event to the focal person, the situation is particularly salient for him or her and the subject will give more emphasis to the situation and see how to respond to it. They need to be very cautious in responding since they are going to take the responsibility for the outcomes (Skarlicki & Kulik, 2005). On the contrary, if the event is not relevant to the focal person, he or she does not have such compelling need to respond to the event, thus adopting strategies involving less effortful processing. High relevance will lead people to intensely process the information (Kunda, 1990). There is empirical evidence showing that even very simple manipulations of personal relevance are found to result in quite profound changes in processing strategies (Brewer, 1988; Forgas, 1991; Forgas & Fielder, 1996).

In organizational justice events, employees have different degrees of personal relevance with them. Some events may be more personally relevant to some employees. For example, some employees might be personally involved in the events in that the

procedures they encountered are not consistent to all employees such as being insulted verbally by their supervisors. These personal experiences compel them to intensely process all the information in a careful way to respond to the event. It might also be that despite the lack of personal involvement, the results of the events will influence the focal person. For example, the unfair procedures in one department are likely to apply to other departments of the company, so that such events are also highly relevant to people all through the company and people will process information very substantively, thus infusing their justice perceptions with affective states.

Another organizational context is group interaction, which is one operationalization of the context feature of social desirability. Previous research on emotional contagion proposed that social support would greatly enhance individuals' emotions (Degoey, 2000). According to Schachter's (1959) affiliation model, social support under stressful circumstances can lead to a polarization of emotions, because of two mechanisms, namely, emotional uncertainty reduction and social hypothesis validation. Based on this argument, when people in negative mood discuss their situations, they learn how others have emotionally experienced and can be more certain of how they should react to the event. In addition, being with people who share the same or similar emotions and perceptions help enhance individuals' own emotions and their "appropriate justice interpretation". That is to say, a group with negative affect is likely to express exaggerated emotions. The same logic also applies to positive affect in group context. People obtain social support from others who feel in the same way and their "hypothesis" of the proper way to express their feelings could be validated by others' positive affect, and at the same time their uncertainty of the socially desired affect will be reduced. Therefore, based on the affiliation model and uncertainty reduction, under the group context, people's positive or negative affect could be backed up by other group members'

similar feelings, thus enhancing and exaggerating the magnitude of the affect.

However, when organizational contexts are taken into account, this argument may not stand. Although the above evidence showed that group discussion should amplify whatever individual distortions occur in individual judgments (normative and informational pressure), either positive affect or negative affect, I only agree partly. I am with the scholars above that when individuals with positive affect gather in a group, such positive affect may amplify because as we mentioned positive affect signals a safe environment and needs no change. Therefore, happy individuals feel even happier and make affect congruent judgments in the group context. We suspect whether this might hold for the negative emotions in group discussion context. Our suspicion comes from the notion that the pure laboratory settings are different from the organizational settings where employees are responsible for the consequences of their improper emotion display. Different from the laboratory context, in the real workplace there are rules of which kind of affect is desirable and which is not. Generally speaking, positive affect, rather than negative affect, is more likely to be accepted in organizations. A hypothesis will be developed concerning the differential effect of positive and negative affect in group interaction context in the next chapter.

In sum, contextual features of organizations are essential to understand the production and consequences of moods and emotions in organizations (Brief, 2001). As for individual differences, it is reasonable to assume that it may create differences in the adoption of processing strategies or the way of affect being used as information to make judgment. Unfortunately, as Greenberg and Ganegoda (2007) pointed out, little help us better understand the nature of the cognition-affect relationship. In developing the AIM model, Forgas (1995) also suggested that the role of individual differences in regulating affective effects clearly deserves more attention in future research. Degoey (2000) further

proposed that individual differences, such as self-monitoring can improve or impede the justice contagion. Nevertheless, very few empirical studies have been conducted to conceptualize and test whether individual differences in handling affect will play an important role in the human judgment such as the formation of justice perceptions. We suspect one of the reasons for this relatively few empirical studies in the literature is due to the controversial debate on studying human abilities in handling affect. As there is significant progress in the area of emotional intelligence in the past two decades, the chance of incorporating this important individual difference variable in the AIM should have been emerged. In the next section, I will briefly review the construct of emotional intelligence, especially emotional control, and its potential role in the AIM model.

2.6 Emotional Control

As reviewed above, the role of individual differences receive relatively little attention in the AIM model. This is understandable because the major focus of AIM is to describe the relationship between the adopted processing strategies and the subsequent effect of affect in judgment. However, as emotions and moods are basically personal feelings, it is possible that individuals may differ in how they handle and incorporate their feelings into their final judgment even when they adopt similar processing strategies. Emotional control is incorporated into the current study as one operationalization of the judge feature in terms of the judge's ability to regulate their affect from influencing their justice perceptions. In the past two decades, the literature on emotional intelligence has emerged as a summary of the abilities of how individuals differ in their abilities and ways to deal with affective issues. The element which is most relevant to the affective regulation is emotional control.

Emotional intelligence refers to a set of interrelated abilities possessed by

individuals to deal with emotions and is thought to be rooted in the concept of social intelligence (Wong & Law, 2002). It is defined as "the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth" (Mayer and Salovey, 1997: p. 10).

As one type of intelligence, emotional intelligence has been validated and found to have met the traditional standards for intelligence (Mayer, Caruso, & Salovey, 2000). The three criteria are: first, it should meet the conceptual criteria that it can be able to be operationalized as a set of abilities; second, it should meet the correlational criteria that it those abilities should intercorrelate with each other moderately; third, the developmental criteria requires that as a set of abilities, emotional intelligence should be able to develop and trained with age and experience (Wong, Foo, Wang, & Wong, 2007). Other empirical studies have also validated that emotional intelligence can be distinguished from the related constructs and explain variance beyond them, such as social intelligence, empathy (Mayer et al., 2000), personality traits (Davies, Stankov, & Roberts, 1998; Law, Wong, & Song, 2004), and General Mental Ability (Law, Wong, Huang, & Li, 2008).

There are four dimensions of the emotional intelligence, namely, appraisal and expression of emotion in the self, appraisal and recognition of emotion in others, regulation of emotion in the self and others, use of motion to facilitate performance (Davies et al., 1998). Appraisal and recognition of emotion in others represents being aware of both their mood and of their thoughts concerning that mood. Appraisal and recognition of emotions in others mean being aware of others' mood and thoughts concerning that mood. Evidence has showed that appraisal of one's own feelings and appraisal of the feelings of others may be related and inseparable.

The focus of the current study, regulation of emotion in the self and others, refers to the meta-experience of mood, or monitoring, evaluating, and acting to change one's mood. Usually this leads to the repair of negative mood and maintenance of positive mood. Use of emotion to facilitate performance involves selective attention and self-motivation. These four dimensions are also referred to as abilities to perceiving, assimilating, understanding and managing emotions (Mayer et al., 2000).

Through emotion regulation (Gross, 1998a, 1998b), emotional intelligence is related to a bunch of important organizational outcomes, such as likelihood of success at work, job performance, life satisfaction, job satisfaction, organizational commitment, turnover intention (Wong & Law, 2002; Wong, Law, & Wong, 2004), as well as individuals' physical and physiological health (Gross, 1989, 1998; Gross & Levenson, 1997). These findings hold through samples from different countries and regions (Law et al., 2008; Wong et al. 2004; Wong, Wong, & Law, 2007). Both employees and leaders can benefit from high emotional intelligence on their job performance and organizational attitudes (Wong & Law, 2002). However, it is difficult to argue that emotional intelligence is equally important for all jobs and it is found that emotional labor (Hochschild, 1983) moderates the relationship between the emotional intelligence and organizational outcomes such that the influence for emotional intelligence is stronger for jobs with high emotional labor than those with low emotional labor (Wong & Law, 2002). That is to say, when the environment requires high level of emotional labor, it is the emotional control that can distinguish those who can deal with emotional stress well from those who cannot.

It has been documented that one of the underlying mechanisms of the influence of emotional intelligence on its outcomes is emotional regulation. Emotional regulation refers to the "processes by which individuals influence which emotions they have, when

they have them, and how they experience and express these emotions" (Gross, 1998a: p. 275). Gross viewed the emotions as response tendencies which can be modulated and further raised a process model of emotion regulation. It is argued that emotion may be regulated at five points: selection of the situation, modification of the situation, deployment of attention, change of cognitions, and modulation of responses. Situation selection refers to selectively approaching or avoiding certain people, places, or objects in order to regulate emotions. Situation modification refers to active efforts to directly modify the situation in order to change its impact on emotions. Attentional deployment means changing attentional focus, either by distraction, concentration, or rumination, in order to reduce the impact of emotion. Cognitive change represents positively interpret events. Finally, response modulation refers to directly influencing physiological, experiential, or behavioral responding, such as drug and exercise. In a related study, Gross (1998b) further categorized these five aspects into antecedent- and response-focused emotion regulation. In other words, individuals good at emotional control can deal with their emotions well either by changing their situations or changing themselves including attention, cognition, and response.

In short, literature on emotional intelligence and emotional regulation indicates that emotional control may help individuals regulate their affect. Thus, it is reasonable to assume that individuals who differ in their emotional control may response differently to the same affective situation. As such, the role of affect in the formation of their justice perceptions may also be different.

In this chapter, I have reviewed the literature on affect and justice. I began with a brief introduction of the four types of justice and the domain of affect. Then the traditional approach was reviewed in a critical way, followed by the raise of a new approach to look into justice perception formation. Then the AIM is intensely reviewed,

including its assumptions, four processing strategies, and the three sets of variables determining the processing strategies. Finally, the literature of emotional control, which has been proved relevant and valuable to study the effect of affect on justice perceptions, was reviewed. In the next chapter, hypotheses will be developed based on the theoretical background in this chapter.

3. Hypotheses Development

In the last chapter, literature on justice, affect, and AIM was reviewed. In this chapter, hypotheses will be developed based on the AIM model, including an affect-congruent effect, asymmetric effect of positive and negative affect, and a set of moderation effects of emotional control, personal relevance, and group context. The former two variables are two representatives of the judge feature, and the latter one is a representative of the situation feature.

In the current study, the possible role of target feature is not examined. This is because the research on the relative complexity, typicality, and familiarity of the target (distributive justice, procedural justice, and interactional justice) is not conclusive yet. In other words, it is difficult to argue which justice type is more complex, typical, or familiar than other justice types. Distributive justice can be either simple or complex, depending on different organizational practices. In organizations where the benefit and pay system is very transparent, distributive justice is easy to judge and therefore the simplicity and typicality will be high; however, in other organizations where the salary is among the "top secrets" in the organization, distributive justice becomes complex to judge because employees have difficulty in accessing necessary information to make that judgment. In the same vein, procedural justice can be simpler when organizations make policies in a clear way and make sure every employee knows the rules and regulations and it can be complex when everything is kept in the black box or changes too quickly to comprehend. The same logic also applies to interactional justice. People may argue that interactional justice is based on everyday interactions and should be very simple to judge. However, the chance is also very big that there is fluctuation and variance in the supervisor's personal treatment of their subordinates so that interactional justice becomes

complex to judge. Therefore, considering the mixed arguments on the complexity, typicality, and familiarity of the three justice types, no hypotheses will be developed along the stream of the target feature.

3.1 Affect-Congruent Effect

Based on the literature review on AIM above, it is noted that when the judgments are about highly familiar and specific issues for which past evaluations can be directly accessed, or when highly targeted, motivated processing is used, affect often fails to show an affect infusion effect. In contrast, when judgment is about global or unfamiliar issues, or is personally relevant, affect is more likely to exert an influence on individuals' judgments. According to AIM along with the complex and diversified events taking place in the organizational situations, it is proposed that affect infusion happens often and when affect infusion takes place, affect leads to an affect-congruent influence on individuals' judgment (Forgas, 1995). Therefore, it is expected that affect generally functions as antecedents of individuals' justice perceptions, including distributive justice, procedural justice, interpersonal justice, and informational justice.

Considering the findings that positive affect and negative affect are not two polar of a continuous construct but rather are two independent and distinct constructs (Diener & Emmons, 1985), it is proposed the affect-congruent effects as below:

H1: positive affect is positively related to individuals' perceptions of distributive justice, procedural justice, interpersonal justice, and informational justice.

H2a: negative affect is negatively related to individuals' perceptions of distributive justice, procedural justice, interpersonal justice, and informational justice.

3.2 Asymmetric Effects

There is little research that has studied the possible differential effects of positive and negative affect on justice perceptions. It is one of attempts in the current study to explore the negativity effect on individuals' justice perceptions formation, which is that negative affect exerts stronger influence on individuals' justice perceptions than the positive affect does.

According to the AIM, substantive processing strategy is more vulnerable to affect infusion effect than the heuristic processing strategy (Forgas, 1995), and negative affect is more likely to evoke substantive processing and positive affect is more likely to produce heuristic processing strategy. In this sense, individuals' justice perceptions are more likely to be influenced by negative affect. It can be explained by the functionalist view of emotion that affective states "exist for the sake of signaling states of the world that have to be responded to" (Frijda, 1988, p. 354). That is, when individuals are in positive affective states, the affect informs them that the situation around is favorable and nothing needs to be changed, so that little monitoring effort is required and the affect information will not be processed or intensively processed. In contrast, negative affective states suggest that the recipients are in danger and alert processing strategy is needed (Schwarz, 1990). Thus, the negative affect information will be processed and take stronger effect. It is also consistent with previous research that positive affective states are assumed in individuals' life so that when negative affective states emerged, they become quite salient and quickly become alert signs.

In sum, based on the framework of AIM, the asymmetrical effect of positive versus negative affect relates to their differential influences on cognitive processing. While individuals in positive affect tend to use heuristic, as opposed to analytical processing,

individuals in negative affect often perform more careful processing, allowing the affect infusion to occur. In other words, negative affect should influence people's justice perceptions more than positive affect. Therefore, we propose that:

H3: negative affect exerts stronger influence on individuals' perceptions of distributive justice, procedural justice, interpersonal justice, and informational justice, than positive affect does.

3.3 Judge Feature 1: Emotional Control and affect

The AIM suggests that the role of individual differences in regulating affect clearly deserves more attention (Forgas, 1995). A representative study of Schwarz and Clore (1983) found that affect influences participants' rating on happiness and life satisfaction on rainy or sunny days. However, the negative impact of bad moods was eliminated when research participants were induced to attribute their present feelings to transient external sources that are irrelevant to the evaluation of their lives. In other words, individuals who are aware of the influence of affect have a better knowledge how to use their affect through emotion regulation.

In the same vein, people higher in emotional control have a stronger ability to control their emotions to reevaluate the situation. Thus, the influence of affect on their judgments may be reduced. Although this phenomenon is explicitly studied for emotions, the underlying mechanism of the emotion regulation can also be applied to affect in general because there is a large overlap between affect and emotions. Within the framework of AIM, people with higher emotional control are more likely to be aware of their own affective state and its potential influence on their judgments. More importantly, they are more capable of dealing with and controlling the influence of affect, thus

activating the motivated processing strategy. This motivated processing inhibits the possibility of affect infusion and it is the main mechanism of affect control. Therefore, it is hypothesized that:

H4: emotional control moderates the relationships between positive/negative affect and distributive justice, procedural justice, interpersonal justice, and informational justice, such that these relationships will be stronger (weaker) when emotional control is low (high).

3.4 Judge Feature 2: Personal Relevance and Affect

Based on the framework of AIM, it is argued that high personal relevance facilitates the substantive processing strategy, which allows the affect infusion to take place. Specifically, when the target is very important and highly relevant to the focal person, he or she will adopt careful processing strategy, such as heuristic and substantial processing strategies to make the judgment. Such processing strategy involves intense information seeking and processing, where the chance for affective information to be considered is enhanced. In other words, there is much room for the affect to infuse into the judgment and the final judgment will be more likely to be influenced by the judge's affect. On the contrary, low personal relevance facilitates individuals to adopt loose and simple processing strategies that inhibit affect infusion to occur. Therefore, in view of the differential degree of personal relevance of justice events happening in organizations, it is hypothesized that:

H5: Individuals' distributive justice, procedural justice, interpersonal justice, and informational justice perceptions will be more influenced by affect in high personal

relevance conditions than in low personal relevance conditions.

3.5 Situational Feature: Group Context and Affect

According to the AIM model, situational features will influence the processing strategy that will be adopted. It is proposed that in a group setting there will be a positive polarization and negative inhibition effect. We refer to positive polarization and negative inhibition effect to that through group discussions and interactions, the effect of group members' happy affective states will be enhanced while the effect of group members' negative affective states will be weakened. It is because of the following two reasons. First, negative moods rely on more cautious, controlled and analytic cognitive processes according to the AIM. That is, by gathering together in the group and through group discussion, individuals are more likely to be aware of their negative affect. Based on the logic of AIM, the awareness of affect in the group context and its influence leads individuals to adopt controlled, motivated processes which will inhibit the affect infusion to occur. Second, relevant social and cultural norms and values constrain negative judgments of others, especially in the eastern cultures where people avoid expressing negative affect toward sensitive objects, such as the organization and their supervisors so that it is more likely for them to express higher justice perceptions in the group context than on an individual decision basis. On the contrary, positive affect is largely accepted and favored in most cultures, which encourage and enhance the influence of positive affect on justice perceptions in group context.

In sum, group discussion will enhance positive mood effects on judgments, but inhibit affectively-based distortions in negative moods. Therefore, it is hypothesized that:

H6: under group discussion context the relationship between positive affect and justice

perceptions (i.e., distributive justice, procedural justice, interpersonal justice, and informational justice) will be stronger than under individual context; under group discussion context the relationship between negative affect and justice perceptions (i.e., distributive justice, procedural justice interpersonal justice, and informational justice) will be weaker than under individual context.

In this chapter, I have developed a set of hypotheses based on the theoretical framework of affect infusion model (AIM), including an overall affect-congruent effect of positive and negative affect, an asymmetric effect of positive and negative affect, followed with the moderating role of a set of variables, including emotional control, judge features, and situational features. In the next chapter, a longitudinal pilot study will be reported to examine a preliminary assumption: whether the rational model is the only and perfect framework to predict how people form their justice perceptions, and whether there is room for affect to take place in people's justice perception formation process.

4. Pilot Study

Based on the literature review in Chapter two, it is clear that the role of affect in the formation of justice perception is possible, important, but under-researched. Considering relatively limited evidence concerning the specific role of affect in the formation of justice perception in organizational setting, I conducted a longitudinal pilot study to test some fundamental positions of affect in justice research. This pilot study serves as a temptation for a larger scale investigation later. In this Chapter, this pilot study is reported.

4.1 Objective and Purpose

Two possibilities are explored in this pilot study: (a) affective commitment is the cause of justice rather than the reverse, and (b) interactional justice is the cause of procedural justice rather than the reverse. The test of these two phenomena can render evidence for the role of affect in justice perception formation. According to the rationalist models, justice perceptions should be the cause of employees' organizational affective commitment, rather than the way reversed, because a rational person forms their organizational commitment only after, but not before, their evaluations of justice. If affective commitment causes justice perceptions, it suggests that there is something which cannot be explained by the rationalist models and it is reasonable to speculate that affective states may explain some variance of justice perceptions. Second, a rational person should be able to differentiate the constructs of interactional justice and procedural justice and there should be no causal relationship between these two constructs. If this is not the case, alternative approach is needed to explain the "abnormal" relationship between these two constructs.

4.2 Sample, Design and Procedures

We invited the employees of a medium-sized social service organization in Hong Kong to participate in a longitudinal study. Out of 115 full time employees, 111 employees completed both waves of the survey. The response rate is 96.5%. In this sample, 60% were female employees. Employees below 35 accounted for 27.8%, those between 36 to 45 accounted for 39.2% and the rest were between 45 and 54. In terms of educational level, 35.6% of them attended high school, 35.7% got associate degree or equal, and 21.7% had bachelor's degree or above.

These employees completed the first questionnaire in February (time 1) and completed the second questionnaire in May (time 2). The interval between the two time points is about three months. Respondents were asked to mailed back the questionnaires directly to the researcher with a return envelop attached. After completing both waves, each employee was paid HK$50. Employees were required to provide their personal information in order to do the longitudinal match, and confidentiality was ensured before the survey.

In both waves, the employees were asked to rate their perceived procedural justice and interactional justice, as well as their affective commitment to their organization. As stated above, if affective commitment is found to influence procedural justice and interactional justice in this longitudinal design, it renders evidence against the rationalist models and offers a possibility that affect is playing a role in the formation of justice perception. Additional support would come from the causal relationship between interactional justice and procedural justice in the current longitudinal study.

4.3 Analyses

I employed structural equation modeling (SEM) to test the hypotheses, using LISREL 8.54. I first estimated the fit of the measurement model using confirmatory factor analysis (CFA) and then evaluate the fit of the full structural models. Overall model fit was examined by various fit indices including root-mean-square error of approximation (RMSEA), incremental fit index (IFI), Tucker-Lewis non-normed index (TLI), and Comparative Fit Index (CFI). The requirements of a reasonable model fit are met if RMSEA is below .08 (Browne & Cudeck, 1993) and IFI, TLI and CFI are above .90 (Bentler & Bonett, 1980; Byrne, 1998; Tucker & Lewis, 1973).

4.4 Measures

Procedural justice (PJ). A seven-item scale adopted from Moorman (1991) was used to measure employees' perceived procedural justice. Sample questions include "formal procedures generate standards so that decisions could be made with consistency", "formal procedures hear the concerns of all those affected by the decision". The Cronbach's alpha was .78 for the first wave and .81 for the second wave.

Informational justice (IJ). A five-item scale adopted from Colquitt (2001) was used to measure employees' perceived informational justice. Sample questions include "your supervisor has been candid in his/her communications with you", "your supervisor has communicated details with you in a timely manner". The Cronbach's alpha was .86 for the first wave and .82 at the second wave.

Affective commitment (AC). A six-item scale adopted from Allen and Meyer (1990) was used to measure employees' affective commitment. Sample questions include "I would be very happy to spend the rest of my career in this organization" and "I really feel as if this organization's problems are my own". The Cronbach's alpha was .89 for the first wave and .88 for the second wave.

All constructs were measured with 5-point Likert scale.

4.5 Results

Table 1 presents the mean and standard deviation of the variables of both time 1 and time 2 as well as the correlations among them. Reliabilities of the scales are provided in the diagonal.

TABLE 1: Descriptions of Variables Under Study

				TIME 1			TIME 2		
		mean	SD	AC	PJ	IJ	AC	PJ	IJ
	AC	3.35	0.71	.89					
TIME 1	PJ	3.17	0.55	.50***	.78				
	IJ	3.40	0.64	.51***	.59***	.86			
	AC	3.21	0.68	.76***	.34***	.40***	.88		
TIME 2	PJ	3.11	0.56	.43***	.63***	.54***	.43***	.81	
	IJ	3.30	0.58	.33***	.49***	.63***	.37***	.70***	.82

Notes: * $p < .10$; ** $p < .05$; $p < .01$

For the data at time 1, the CFA results for the three constructs under study showed χ^2 (132) = 361.80, RMSEA = .12, CFI = .90, IFI = .90, and TLI = .89. When compared with the one-factor model, whose χ^2 (135) = 616.41, RMSEA = .20, CFI = .80, IFI = .80, and TLI = .77, the chi-square change 254.61(3) is strongly significant, showing that our proposed three-factor model indicated a better fit. Similarly, I conducted CFA for the data at time 2 for the three constructs under study, the results showed χ^2 (132) = 486.54, RMSEA = .16, CFI = .85, IFI = .85, and TLI = .82. When compared with the one-factor

model, whose χ^2 (135) = 737.08, RMSEA = .23, CFI = .74, IFI = .74, and TLI = .71, the chi-square change 250.54 (3) is also strongly significant, showing that our proposed three-factor model indicated a better fit than the one-factor model. Although some of the fit indices are not within the ideal ranges, considering the small sample size, results suggest that participants differentiate the constructs better as three distinct constructs than as one construct for both waves. The fit indices and the results of chi-square difference test were showed in Table 2.

TABLE 2: CFA Results of Variables in Time 1 and Time 2

		χ^2 (df)	$\Delta\chi^2$ (Δdf)	RMSEA	CFI	IFI	TLI
time 1	three factor model	361.80(132)***		.12	.90	.90	.89
	one factor model	616.41(135)***	254.61(3)***	.20	.80	.80	.77
time 2	three factor model	486.54(132)***		.16	.85	.85	.82
	one factor model	737.08(135)***	250.54(3)***	.23	.74	.74	.71

Notes: * $p < .10$; ** $p < .05$; *** $p < .01$

After confirming the factor structures of the study variables, I proceeded to test the causal relationship between procedural justice (PJ) and affective commitment (AC) and between informational justice (IJ) and affective commitment (AC) separately, with the cross-lagged dataset. Three requirements should be met in order to determine a causal relationship according to Christensen (2007). The first condition is that the two variables are correlated. The second condition is that the cause variable happens before the effect variable. The third condition is that there are no other alternative explanations of the causal relationship between the cause and the effect variables. According to Table 1, PJ and IJ are significantly correlated with AC and the nature of the longitudinal study

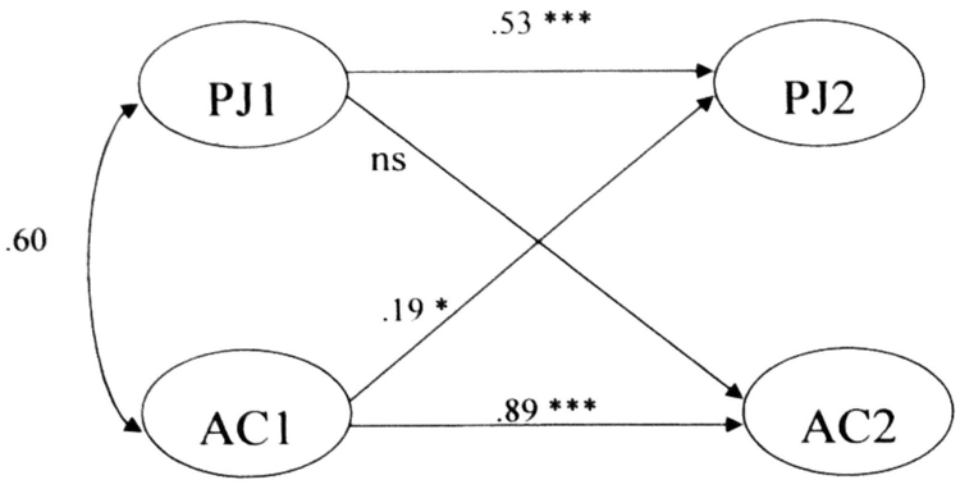
facilitates us to examine the relationship from two time points, fulfilling the first two conditions of a causal relationship. Finally, in order to rule out alternative explanations, such as unspecified third factors influencing both cause and effect variables, I covaried the residuals of the exogenous variables so that the variance that might be explained by other factors will be partialled out. Table 3 shows the LISREL results of the causal relationships of three models (model 1 for PJ and AC; model 2 for IJ and AC; model 3 for PJ and IJ).

TABLE 3: Lisrel Results for Causal Relationships

Models	χ^2 (df)	RMSEA	CFI	IFI	TLI
Model 1: PJ and AC	887.40(293)***	.14	.87	.87	.86
Model 2: IJ and AC	643.05(203)***	.14	.89	.89	.88
Model 3: PJ and IJ	775.56(246)***	.16	.87	.87	.85

Notes: * $p < .10$; ** $p < .05$; ***$p < .01$

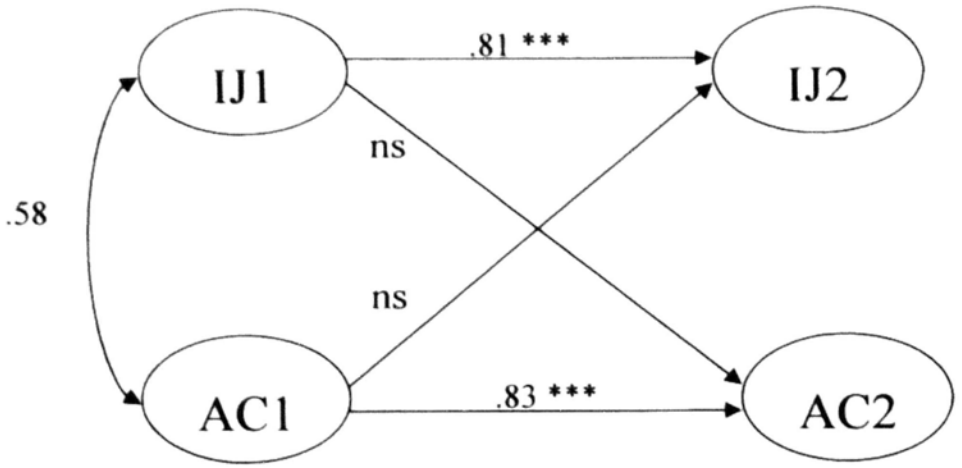
In model 1, PJ at time 1 was specified to lead to PJ at time 2 and AC at time 2; in addition, AC at time 1 was assigned to lead to AC at time 2 and PJ at time 2. The results showed a model with χ^2 (293) = 887.40, RMSEA = .14, CFI = .87, IFI = .87, and TLI = .86. It also showed that both PJ and AC at time 1 were significantly related to their counterparts at time 2. Specifically, PJ at time 1 predicted PJ at time 2 ($\beta = .53, p < .01$) and AC at time 1 predicted AC at time 2 ($\beta = .89, p < .01$). Moreover, PJ at time 1 was not found to be significantly related to AC at time 2 while AC at time 1 was found marginally significantly related to PJ at time 2 ($\beta = 0.19, p < .10$). Results of this model concerning the relationship between affective commitment and procedural justice are shown in Figure 2.



Notes: * $p < .10$; ** $p < .05$; *** $p < .01$

Figure 2 causal relationships of model 1

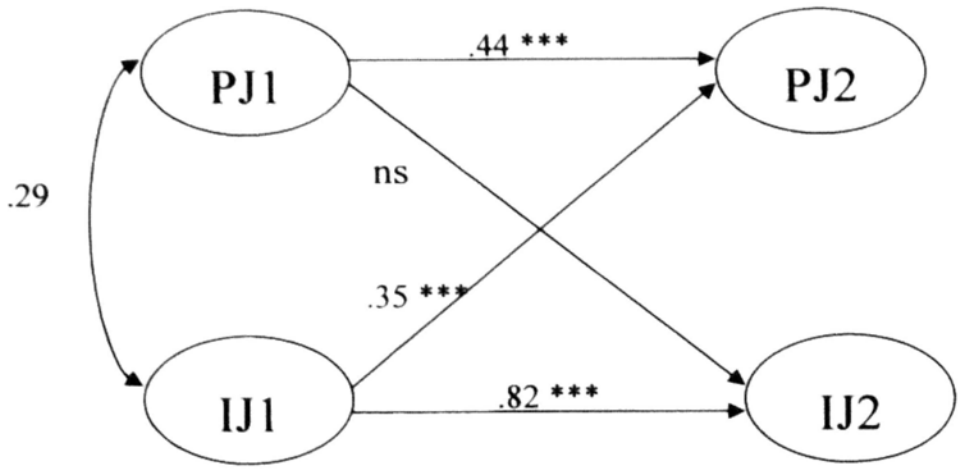
Similar test was done for the causal relationship between IJ and AC. In model 2, IJ at time 1 was specified to lead to IJ at time 2 and AC at time 2; in addition, AC at time 1 was assigned to lead to AC at time 2 and IJ at time 2. This model resulted in a model fit with χ^2 (203) = 643.05, RMSEA = .14, CFI = .89, IFI = .89, and TLI = .88. It also showed that both IJ and AC at time 1 predicted their counterparts at time 2. Specifically, IJ at time 1 significantly predicted IJ at time 2 ($\beta = .81, p < .01$) and AC at time 1 significantly predicted AC at time 2 ($\beta = .83, p < .01$). However, neither the path from AC at time 1 to IJ at time 2 nor the path from IJ at time 1 to AC at time 2 was significant. Results of this model concerning the relationship between affective commitment and interactional justice are shown in Figure 3. This result is consistent with the multifoci approach that because affective commitment is directed to the organization but not the supervisor, it only influences procedural justice which is system-focused, but not interactional justice, which is agent-focused.



Notes: * $p < .10$; ** $p < .05$; *** $p < .01$

Figure 3 causal relationships of model 2

In model 3, we tested the causal relationship between PJ and IJ in the same way as model 1 and model 2. This model achieved a model fit of χ^2 (246) = 775.56, RMSEA = .16, CFI = .87, IFI = .87, and TLI = .85. Similar patterns between constructs at two points of time occurred. PJ at time 1 predicted PJ at time 2 ($\beta = .44, p < .01$) and IJ at time 1 predicted IJ at time 2 ($\beta = .82, p < .01$). In addition, it is worth noting that PJ at time 1 did not significantly predicted IJ at time 2, while IJ at time 1 significantly predicted PJ at time 2 ($\beta = .35, p < .01$). That is to say, interactional justice leads to procedural justice, rather than the opposite way. Results of this model concerning the relationship between affective commitment and interactional justice are shown in Figure 4.



Notes: * $p < .10$; ** $p < .05$; *** $p < .01$

Figure 4 causal relationships of model 3

4.6 Conclusion

The evidence from the longitudinal data suggested that affective commitment predicts informational justice and informational justice predicts procedural justice. This finding cannot be explained by the rationalist model according to which justice perceptions should lead to commitment evaluation, and individuals perceive informational justice and procedural justice as two distinct constructs. However, this seemingly abnormal finding becomes understandable if we use different lens, i.e., the role of affect. With this perspective, affective commitment influences procedural justice because the emotional attachment inferred from affective commitment exerts impact on perceptions made within organizations, such as procedural justice. And informational justice influences procedural justice because the affective reactions aroused by interactions with supervisors can influence procedural justice through the affective spillover.

This speculation infers that rationalist models are not an elixir and that affective infusion may provide a supplementary perspective to look into the process of individuals' justice perception formation. However, it is worth noting that this is just a preliminary

examination of the standing point that the traditional and dominating approach to justice is not sufficient and some variance cannot be explained by this model. It is admitted that this pilot study is not designed for hypotheses testing and it is far from strictly designed without flaws and. That is why I proceeded to conduct the main studies with experimental design to directly test my hypotheses. The next two chapters are the reports of two studies composing of student sample and employee sample.

5. Study 1

In the current experimental study, the hypotheses were tested concerning the role of affect in justice perception formation using a student sample. One hundred and forty two undergraduate students from a comprehensive university in Hong Kong voluntarily participated in this study.

5.1 Sample Description

These 142 students were from four sessions of an undergraduate course at Faculty of Business Administration at this university. Two of the sessions (A1 and A2) were taught by teacher A and the other two sessions (B1 and B2) were taught by teacher B. This sample was relatively homogeneous and no significant differences in demographics were found between the sessions taught by the two teachers. The whole sample was composed of 55.3% female and 44.7% male students. Of these students, 80.9% were at grade 2. Their ages were all in the range from 18 to 24. As to the major, 89.6% of the students had business administration as their specialty, with different focus such as management, marketing, finance and accountancy. The rest 10.4% of the students were from a variety of other majors, such as law, engineering, physics, and computer science.

5.2 Experimental Design

This was a 2 (positive/negative affect)*2 (group/individual) mixed experimental design. The manipulation of affect is between-subjects and each student got either positive affect manipulation or negative affect manipulation. The group/individual manipulation is within-subjects. All students filled out the questionnaire individually followed by a group discussion session with other group members. They would reach a

group consensus on items about justice perceptions and this consensus score was distributed to each group member as their score in the group discussion condition.

5.3 Procedures and Manipulation

Because students were from sessions taught by two different teachers, in order to balance the means of the measured variables, classes A1 and B1 were assigned to receive the positive affect manipulation, and classes A2 and B2 were assigned to receive the negative affect manipulation. The class sizes of the four sessions were about the same, ranging from 31 to 40 so that the means of the variables were balanced out and the influence of teacher on results was minimized to the largest degree. Finally, there were 71 students in positive affect condition and 71 students in negative affect condition.

In the two sessions of positive affect condition, students were greeted and invited to take some chocolates brought by the researcher while listening to the explanations of the experiment. Then they were given a questionnaire and asked to follow the instructions of the researcher to fill it out. The questionnaire began with the positive affect manipulation instruction (Schwarz & Clore, 1983): in the following half a minute, please close your eyes and think about a happy event that happened very recently, which makes you happy even when you think of it now. It can be happened in school, family or your personal life. The researcher also raised some examples, such as gaining good grade in school, winning a lottery, and having fun with friends you haven't seen for a long time. After they recalled such an event, they were asked to answer the following four questions (Schwarz & Clore, 1983): please describe this event which makes you feel very happy; please describe your feelings when this event happened; please describe what aspects made you feel so; please describe what such an event made you think about. After this manipulation session, students were asked to complete the measurements followed, including PANAS,

manipulation checks, distributive justice, procedural justice, interpersonal justice, informational justice, emotional control, positive affectivity, negative affectivity, personal relevance (of distributive justice, procedural justice, and interactional justice) and demographic information.

After the students completed the questionnaire individually, they were asked to form groups with two or three classmates. Each group was given one group discussion sheet about justice perceptions. Then they discussed with their group members over the four justice dimensions including distributive justice, procedural justice, interpersonal justice, and informational justice. They were asked to thoroughly discuss each item and make sure that each group member can raise their opinions and concerns. Finally they should reach a group consensus score and mark that down in the answer sheet. After the group discussion, the group members submitted the individual questionnaires together with the group discussion sheet on the group basis.

The procedures for the negative affect condition were much the same with those for the positive affect condition, except for the following two aspects. First, students were given chocolates after the whole study so that this present wouldn't intervene their mood in recalling unpleasant events. Second, in the manipulation session, they were asked to recall an event which makes them very unhappy recently. Also, the four questions followed were adjusted accordingly. After the individual questionnaire, students were asked to do group discussion with their group members. This was the same with those in positive affect condition.

Additional insurances were conducted in order to rule out two possible confounding explanations. First, post study interviews were conducted to several participants what they thought of when getting the chocolates. All of them said they did not think of anything related to justice. They just felt happy to have free chocolates. Second, the

reading of the descriptions of the recalled events did not find any particular recalled related to justice either. These efforts have ruled out the possible alternative explanation of the priming effect of the findings in the current study.

5.4 Measures

Manipulation check. Two items were adopted to check whether the affect manipulation was successful or not, "at this moment, I feel very happy", "I feel very good right now" (Schwarz & Clore, 1983).

PANAS. Positive and negative affective states were measured with the 20 adjectival descriptors of mood from the Positive and Negative Affect Schedule (PANAS; Watson & Clark, 1994). Specifically, the ten adjective descriptors from the positive scale were "interested," "enthusiastic," "excited," "strong," "proud," "alert," "inspired," "attentive," "active" and "determined." The ten adjectives from the negative scale were "upset," "irritable," "distressed," "guilty," "scared," "ashamed," "nervous," "jittery," "afraid" and "hostile." Students were asked to indicate the extent to which they experienced each of the feelings described by the PANAS adjectives at the time they were completing the survey (1 = "slightly or not at all," to 5 = "very much"). The Cronbach's alpha was .86 for positive affect scale and .85 for negative affect scale.

Distributive justice. A three-item scale adopted from Colquitt (2001) was used to measure students' perceived distributive justice. Sample questions include "the GPA reflects the effort I have put into my study", "my GPA is appropriate for my performance in study". One item was removed from the original scale "my outcome reflects what I have contributed to the organization", since this item is not suitable for the context of university student. The Cronbach's alpha was .72 for this measurement.

Procedural justice. A seven-item scale adopted from Colquitt (2001) was used to

measure students' perceived procedural justice. Sample questions include "formal procedures generate standards so that decisions could be made with consistency", "formal procedures hear the concerns of all those affected by the decision". Wordings were adjusted to fit the context of university. The Cronbach's alpha was .75.

Informational justice. A five-item scale adopted from Colquitt (2001) was used to measure students' perceived informational justice. Sample questions include "this instructor has been candid in his/her communications with me", "this instructor has communicated details with me in a timely manner". Wordings were adjusted to fit the context of university. The Cronbach's alpha was .83.

Interpersonal justice. A four-item scale adopted from Colquitt (2001) was used to measure students' perceived interactional justice. Sample questions include "this instructor has treated me in a polite manner", "this instructor has treated me with respect". The Cronbach's alpha was .74 for this scale.

Emotional control. A 4-item scale developed by Wong and Law (2002) was employed to measure the construct of emotional control. A sample item is "I have good control of my own emotions". The Cronbach's alpha was .92 for this measurement.

Positive affectivity. A three-item scale developed by Olekalns and Erwin (1998) was used to measure the positive affectivity. These three items are "for me, life a great adventure", "I live a very interesting life", and "I usually find ways to liven up my day". The Cronbach's alpha was .77.

Negative affectivity. Another three items were employed to evaluate the negative affectivity of the subjects (Olekalns & Erwin, 1998), including "minor setbacks sometimes irritate me too much", "often I get irritated at little annoyances", and "there are days when I'm 'on edge' all the time". The Cronbach's alpha was .59.

Personal relevance. The personal relevance of justice was measured with two items

for each justice type. For distributive justice, the two items were "GPA is very important to me", "without fair GPA, I will be influenced much". For procedural justice, the two items were "procedures of the university are very important to me", "without fair procedures, I will be affected much". For interactional justice (i.e., interpersonal justice and informational justice), the two items were "interpersonal treatment of the instructor is very important to me", "without fair interpersonal treatment from this instructor, I will be affected much". The Cronbach's alpha were .81, .75, and .66, respectively.

Demographics. Information was collected concerning subjects' gender, age, grade, and major.

5.5 Analytical Strategies

I employed structural equation modeling (SEM) to test the factor structure of the nine study variables, namely, procedural justice, distributive justice, interpersonal justice, informational justice, emotional control, positive affective state, negative affective state, positive affectivity, and negative affectivity. LISREL 8.54 was used to conduct the confirmatory factor analysis (CFA). Overall model fit was examined by various fit indices including root-mean-square error of approximation (RMSEA), incremental fit index (IFI), Tucker-Lewis non-normed index (TLI), and Comparative Fit Index (CFI). The requirements of a reasonable model fit are met if RMSEA is below .08 (Browne & Cudeck, 1993) and IFI, TLI and CFI are above .90 (Bentler & Bonett, 1980; Byrne, 1998; Tucker & Lewis, 1973).

ANOVA was used to conduct manipulation checks. Hierarchical regression was used to test the hypothesized moderation effects. I conducted hierarchical regression analysis following the procedures recommended by Aiken and West (1991). In step 1 I entered the control variables, including age, gender, positive affectivity, and negative

affectivity, in step 2 I added in the main effects, and in step 3 I entered the interaction term between the variables. If the interaction term is significant, that indicates the two variables interact in influencing the outcome variable. Hypothesis 6 proposed a moderation effect between two variables of a mixed design, in which one is between-subject and the other is within-subject. In order to test this hypothesis, GLM with repeated measures was used.

Table 4 Descriptive Statistics and Pearson Correlations

Variables	mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. procedural justice	3.67	0.80	.75															
2. distributive justice	3.92	1.08	.26***	.72														
3. interpersonal justice	5.03	0.70	.08	.21**	.74													
4. informational justice	5.35	0.67	.06	.14	.67***	.83												
5. positive affective state	2.86	0.66	.18**	.08	.11	.24***	.86											
6. negative affective state	2.39	0.68	-.12	-.04	-.18**	-.15*	-.27***	.85										
7. PR of distributive justice	5.82	0.95	-.00	-.05	.04	.13	.11	-.08	.81									
8. PR of procedural justice	5.13	0.91	-.01	.01	.03	.24***	.12	.05	.41***	.75								
9. PR of interactional justice	5.15	0.93	.02	.03	.35***	.38***	.18**	-.05	.37***	.46***	.66							
10. emotional control	4.89	0.84	-.01	-.01	.12	.24***	.19**	-.12	.12	.10	.08	.92						
11. group procedural justice	3.62	0.56	.42***	.20**	.05	.06	.04	-.08	-.09	.05	-.04	-.05	.55					
12. group distributive justice	3.85	1.19	.08	.30***	.11	.10	.16*	-.12	-.00	.15*	.04	-.01	.33***	.83				
13. group interpersonal justice	5.15	0.57	-.15*	.03	.18**	.22***	-.18**	-.04	.02	-.00	.07	.04	.16*	.05	.68			
14. group informational justice	5.52	0.50	-.02	.10	.07	.17**	-.11	.05	.05	.04	.08	.01	.17**	.08	.68***	.70		
15. positive affectivity	3.83	0.65	.11	.02	.24***	.31***	.31***	-.15*	-.04	-.03	.18**	.26***	.06	.08	-.00	.04	.77	
16. negative affectivity	3.20	0.65	.04	.05	-.09	-.05	.03	.26***	-.05	.04	.04	-.26***	-.04	-.12	-.10	-.18**	-.10	.59

* $p < .10$; ** $p < .05$; *** $p < .01$; PR = personal relevance

Two-tailed tests.

5.6 Results

5.6.1 Correlations

Table 4 presents the descriptive statistics and correlations among the study variables. Two types of correlations are reported. Those below the diagonal represent the correlations among different variables, and those on the diagonal represent the internal consistency of the variables.

5.6.2 Factor Analysis

As shown in Table 5, the nine-factor model achieved an acceptable model fit in terms of all the fit indices, with χ^2 (1084) = 1725.32, RMSEA of .06, IFI of .88, CFI of .88, and TLI of .87. Although IFI, CFI, and TLI in the current study were below .90, the rules-of-thumb is not so absolute (Marsh, Hau, & Wen, 2004). As Iacobucci (2010) suggested, a model demonstrates reasonable fit if the chi-square adjusted by its degrees of freedom does not exceed 3.0 (χ^2/df = 1.59 in the current study). I then performed the Harman's one-factor test by loading all the items to one factor, resulting χ^2 (1127) = 3738.74, RMSEA of .14, IFI of .52, CFI of .52, and TLI of .50, which showed poor model fit. This evidenced that the proposed nine-factor model achieved satisfactory results and that the respondents could distinguish the nine constructs well.

Table 5. Results of confirmatory factor analysis of the measurement models

Models	χ^2 (df)	RMSEA	CFI	IFI	TLI
1-factor Model[a]	3738.74 (1127)***	.14	.52	.52	.50
9-factor Model	1725.32 (1084)***	.06	.88	.88	.87

Notes: ***$p < .01$

5.6.3 Manipulation Checks

ANOVA showed that the experimental manipulation (positive/negative affect) resulted in significant difference in the two items of manipulation checks, "at this moment, I feel very happy" with $F(1,141) = 25.60$, $p < .01$, "I feel very good right now" with $F(1,141) = 12.55$, $p < .01$ (Schwarz & Clore, 1983). Specifically, subjects in positive affect condition felt happier ($M = 4.68$) than those in negative condition ($M = 3.51$); likewise, those in positive affect condition reported feeling better ($M = 4.38$) than those in negative condition ($M = 3.61$). This indicated that the mood manipulation was effective in inducing significantly different affective states in subjects. This was further evidenced by the significant ANOVA results of the direct measurement of positive affective states $F(1,141) = 20.75$, $p < .01$ and negative affective states $F(1,141) = 15.37$, $p < .01$. Specifically, subjects felt more positive affect in the positive condition ($M = 3.09$) than in negative condition ($M = 2.62$); in the same vein, they felt more negative affect in the negative condition ($M = 2.61$) than in positive condition ($M = 2.18$).

5.6.4 Hypotheses Testing

Hypotheses 1 and 2 proposed that positive affect was positively related to the justice perceptions (i.e., procedural justice, distributive justice, informational justice, and interpersonal justice) while negative affect was negatively related to the justice perceptions above. ANOVA was conducted to examine these two hypotheses and the results showed that in different experimental conditions, subjects showed significant differences when making procedural justice perceptions, $F(1,141) = 6.85$, $p < .01$ and distributive justice perceptions $F(1,141) = 4.44$, $p < .01$ in our predicted directions. Specifically, subjects made higher procedural justice in positive mood ($M = 3.85$) than in negative mood ($M = 3.50$); subjects perceived higher distributive justice in positive mood

(M = 4.11) than in negative mood (M = 3.74). Moreover, the results were also significant for the outcome variable interpersonal justice perceptions $F(1,141) = 9.09$, $p < .01$ and informational justice perceptions $F(1,141) = 6.43$, $p < .05$. Subjects gave higher ratings of interpersonal justice (M = 5.20) and informational justice (M = 5.48) in the positive affect condition than in the negative affect condition (M = 4.86; M = 5.21), respectively. Thus H1 and H2 were supported.

Then, I examined differences in the regression coefficients that represent the effect of positive affect and negative affect on justice perceptions with an A-matrix hypothesis test using SYSTAT 10.1 (Dwyer, 1983). A-matrix hypothesis test allows us to examine whether or not a regression coefficient differs from another (for details, see Dwyer, 1983). Unfortunately, no significant differences were found for the effect of positive affect and negative affect on procedural justice with F (1, 133) = .68, $p > .10$, distributive justice with F (1, 133) = .01, $p > .10$, interpersonal justice with F (1, 133) = .46, $p > .10$, and informational justice with F (1, 133) = .39, $p > .10$. Thus Hypothesis 3, arguing that negative affect is more influential in justice perception formation than positive affect, was not supported.

Moderation effect testing. Hypotheses 4 and 5 proposed two moderation effects of emotional control and personal relevance on the relationships between affect and justice perceptions. Hierarchical regression was used to test these two hypotheses, and the results were reported in Table 6 and 7.

Contradictory to our hypothesis 4 which argued that emotional control moderated the relationships between affect and justice perceptions, Step 3 of Table 6 showed that the moderation effect was not significant for any of these relationships, concerning the procedural justice (β = -.08, $p > .10$), distributive justice (β = .18, $p > .10$), interpersonal justice (β = -.01, $p > .10$), and informational justice (β = .07, $p > .10$). The R square

change was not significant for any of these outcome variables, either.

Table 7 summarized the results of the moderation effect of personal relevance (PR) on the relationships between affect and justice perceptions. It showed in Step 3 that PR of distributive justice moderated the relationship between affect and distributive justice (β = .40, p < .05), and PR of procedural justice moderated the relationship between affect and procedural justice (β = .40, p < .01), in the predicted direction so that the more subject care about distributive and procedural justice, their ratings on these two justice types will be more influenced by their affective states. Figure 4 and Figure 5 were showed below. However, the results showed that this moderation effect was not significant for the relationships concerning interpersonal justice (β = -.04, p > .10) and informational justice (β = -.12, p > .10). Thus, hypothesis 5 stating that personal relevance enhances the relationship between affect and justice perceptions was supported partially.

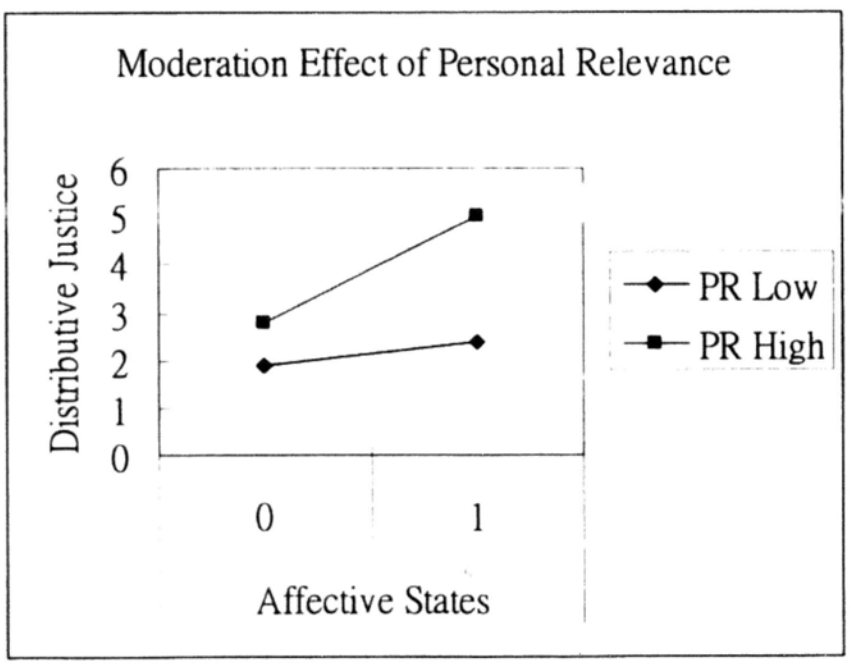


Figure 4. Moderation effect of personal relevance on distributive justice

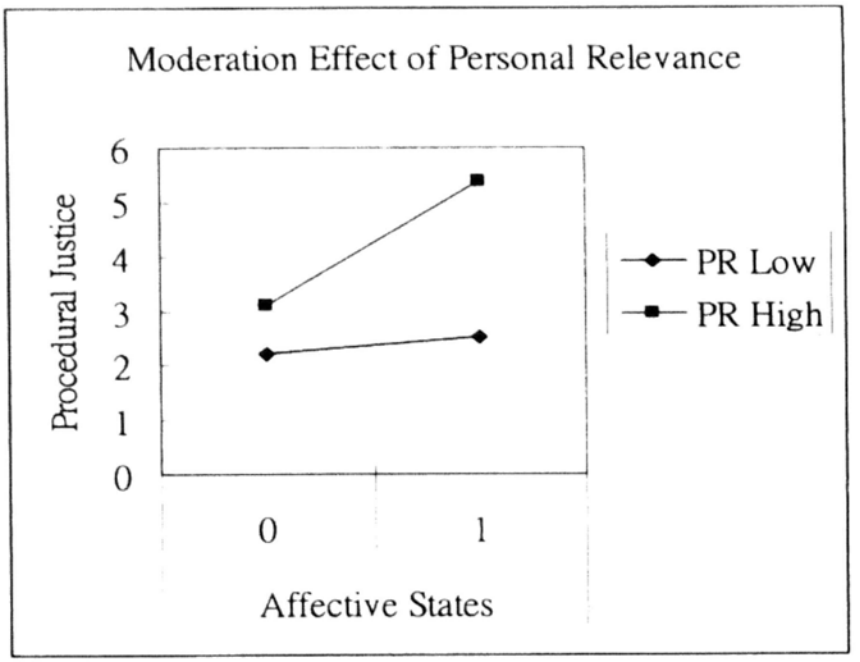


Figure 5. Moderation effect of personal relevance on procedural justice

Table 6 Summary of Moderation Emotional Control on the Relationship Between Affect and Justice Perceptions

	Procedural Justice						Distributive Justice					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
Variable	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
Positive Affectivity	.14	.11	.12	.11	.14	.11	.08	.14	.06	.14	.03	.14
Negative Affectivity	.06	.11	.04	.11	.07	.11	.11	.14	.10	.15	.05	.15
Gender	-.22	.14	-.22	.14	-.22	.14	.27	.19	.27	.19	.27	.19
Age	-.03	.08	-.01	.08	-.00	.08	-.20*	.10	-.17	.11	-.18*	.11
Affect			.35**	.14	.71	.55			.34*	.18	-.50	.74
Emotional Control			.01	.06	.06	.08			.02	.08	-.08	.11
Affect*Emotional Control					-.08	.12					.18	.16
ΔR^2		.04		.05**		.00		.04		.03		.01

*$p < .10$; **$p < .05$; ***$p < .01$

Table 6 Summary of Moderation Effect of Emotional Control on the Relationship Between Affect and Justice Perceptions (continued)

	Interpersonal Justice						Informational Justice					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
variable	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
Positive Affectivity	.25***	.09	.23**	.09	.23**	.09	.33***	.08	.31***	.08	.29***	.09
Negative Affectivity	-.08	.09	-.07	.09	-.07	.10	-.02	.08	.00	.09	-.02	.09
Gender	-.04	.12	-.06	.12	-.06	.12	-.04	.11	-.05	.11	-.05	.11
Age	-.03	.07	-.01	.07	-.01	.07	-.12**	.06	-.10*	.06	-.11*	.06
Affect			.34***	.12	.39	.47			.25	.11	-.08	.43
Emotional Control			.04	.05	.05	.07			.05	.05	.01	.07
Affect*Emotional Control					-.01	.10					.07	.09
ΔR^2		.06*		.06***		.00		.12***		.04**		.00

*$p < .10$; **$p < .05$; ***$p < .01$

Table 7 Summary of Moderation Effect of Personal Relevance on the Relationship Between Affect and Justice Perceptions

	Procedural Justice						Distributive Justice					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
Variable	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
Positive Affectivity	.14	.11	.12	.10	.13	.10	.08	.14	.06	.14	.05	.14
Negative Affectivity	.06	.11	.04	.10	.02	.10	.11	.14	.09	.14	.08	.14
Gender	-.22	.14	-.22	.14	-.20	.13	.27	.19	.27	.19	.22	.18
Age	-.03	.08	-.01	.08	-.03	.08	-.20*	.10	-.17	.11	-.19*	.10
Affect			.35**	.14	-1.71**	.76			.34*	.18	-1.99*	1.17
Personal Relevance			-.00	.07	-.20**	.10			-.03	.10	-.22	.14
Affect*Personal Relevance					.40***	.15					.40**	.20
ΔR^2	.04		.05**		.05***		.04		.03		.03**	

*$p < .10$; **$p < .05$; ***$p < .01$

Table 7 Summary of Moderation Effect of Personal Relevance on the Relationship Between Affect and Justice Perceptions (continued)

	Interpersonal Justice						Informational Justice					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
variable	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
Positive Affectivity	.25***	.09	.18***	.09	.17**	.09	.33***	.08	.26***	.08	.25***	.08
Negative Affectivity	-.08	.09	-.11	.08	-.11	.09	-.02	.08	-.05	.08	-.05	.08
Gender	-.04	012	.05	.11	.05	.11	-.04	.11	.06	.10	.06	.10
Age	-.03	.07	-.01	.06	-.01	.06	-.12**	.06	-.11*	.06	-.10*	.06
Affect			.34***	.11	.53	.66			.24**	.10	.85	.60
Personal Relevance			.25***	.06	.28***	.10			.25***	.06	.33***	.10
Affect*Personal Relevance					-.04	.13					-.12	.12
ΔR^2		.06*		.16***		.00		.12***		.15***		.01

*$p < .10$; **$p < .05$; ***$p < .01$

In order to test hypothesis 6 arguing a positive polarization and negative inhibition effect, which contains one between-subjects variable and one within-subjects variable, I used General Linear Model—repeated measure to partition the total variance. Affect is the between-subjects variable and the condition of individual/group discussion (I/G) is the within-subjects variable, so that the interaction of affect with I/G is also a within-subjects effect (Howell, 2007). The critical part of the examination is to see whether this within-subjects interaction term can explain a significant amount of the total variance. The results were showed in Table 8, which suggested that this interaction term was significant for procedural justice, interpersonal justice, and informational justice, except for distributive justice $F(1, 134) = 2.54, p > .05$.

Specifically, for the outcome variable procedural justice, $F(1, 134) = 6.00, p < .05$. In the negative affect condition, subjects perceived higher procedural justice in group discussion condition ($M_G = 3.62$) than in individual condition ($M_I = 3.50$), while in the positive affect condition, subjects perceived lower procedural justice in group discussion condition ($M_G = 3.63$) than in individual condition ($M_I = 3.85$).

For the outcome variable interpersonal justice, $F(1, 134) = 8.46, p < .01$. The contrast showed that the effect of I/G exerted significant effect only in the negative condition and subjects raised interpersonal justice higher in group discussion condition ($M_G = 5.18$) than in individual condition ($M_I = 4.86$). The result was similar for informational justice, $F(1, 134) = 19.89, p < .01$. The contrast on the difference showed that the effect of I/G exerted significant effect only in the negative condition and subjects raised informational justice higher in group discussion condition ($M_G = 5.66$) than in individual condition ($M_I = 5.21$). It can be concluded that subjects restrained the effect of their negative affective states in the group context when forming procedural justice perception and interactional justice perceptions, than in the individual context. The

influence of positive affect on justice perceptions was not found to be enhanced, however. Therefore, H6 was supported partially. For a clearer picture of this moderation effect, please refer to the figures 6, 7, and 8 below.

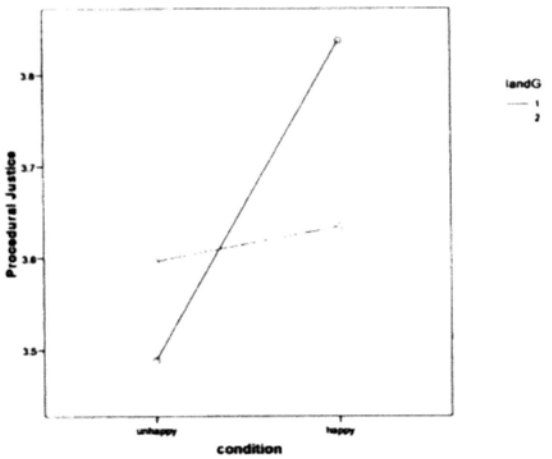


Figure 6. Moderation effect of I/G on procedural justice.

Notes: landG 1: individual; landG 2: group context.

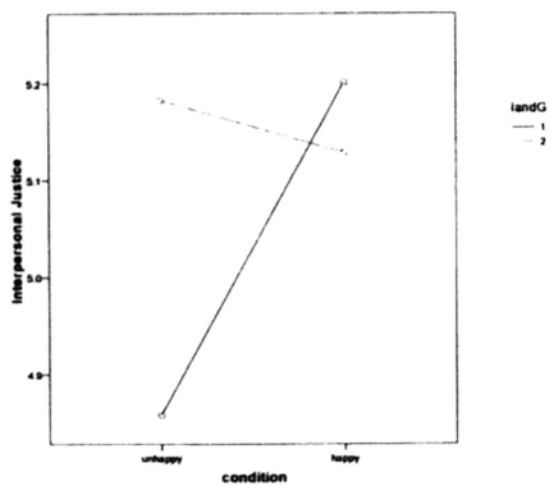


Figure 7. Moderation effect of I/G on interpersonal justice.

Notes: landG 1: individual; landG 2: group context.

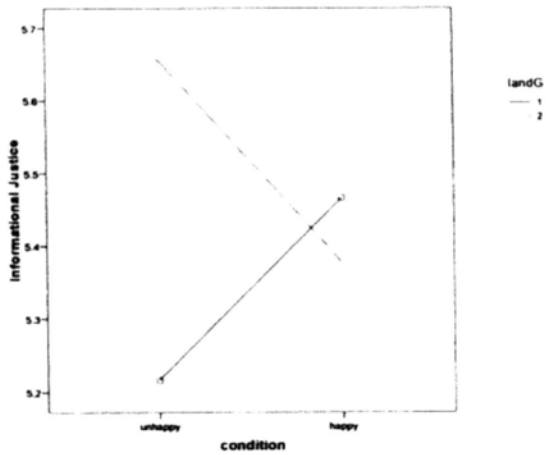


Figure 8. Moderation effect of I/G on informational justice.

Notes: landG 1: individual; landG 2: group context.

Table 8 Within-Subjects Contrasts of Moderation Effect of Group Context on the Relationship Between Affect and Justice Perceptions

	Procedural Justice			Distributive Justice		
	df	SS	F	df	SS	F
Affect*I/G	1	1.65	6.00**	1	2.00	2.54

	Interpersonal Justice			Informational Justice		
	df	SS	F	df	SS	F
Affect*I/G	1	2.68	8.46***	1	4.81	19.89***

*$p < .10$; **$p < .05$; ***$p < .01$

5.7 Discussion

Empirically, the current study used an experimental design to examine the role of affect in individuals' justice perceptions formation. As predicted, it is found that positive

affect tends to be associated with higher justice perceptions, including procedural justice, distributive justice, interpersonal justice, and informational justice, and likewise, negative affect is more likely to induce lower justice perceptions mentioned above.

In addition to these main effects, the following moderation effects are also of special interest. First, when individuals care more about distributive justice and procedural justice and perceive these two justice types as very important to them, their perceptions of distributive justice and procedural justice will be more influenced by their affect; in other words, compared with individuals with lower personal relevance, their distributive justice and procedural justice will be even higher if they are in positive affective states and be even lower if they are in negative affective states. This suggests that when individuals care about the outcomes and the procedures, they are more likely to be influenced by their affective states and their respective justice perceptions will be colored by their moods and emotions to a larger degree. In the theoretical framework of AIM, when the personal relevance is high, individuals will make judgments more carefully and seek for more relevant information. In this case, it is more likely that the affective information will be salient, processed, and infused into people's judgment on justice perceptions.

Second, the contextual factor plays a role in how much individuals' justice perceptions are subject to the influence of affect. It is found that it matters when individuals are in a group context. As mentioned above, when individuals are in negative affect, they are more likely to form lower justice perceptions than those in positive affect. In the current study, when individuals are in a group context and discuss with their group members, their procedural justice, interpersonal justice, and informational justice perceptions are higher than when they make judgments on their own. It seems that individuals constrain their judgments from the influence of negative affect. According to

AIM, when people are in a context with public pressure, such as group consent or maintenance of self-image, they will be involved in motivated processing of affect so that the influence of affect will be reduced. In my study, when people are in negative mood and need to discuss with others to make a judgment, it is more likely that their motive to avoid group pressure and maintain positive self-image will push them to think in a more convergent way with other group members.

Interestingly, this inhibition effect is also found in positive affect for procedural justice. Individuals also inhibited their positive affective influence in making their procedural justice perceptions when they are in a group context. This is contradictory to our hypothesized positive affect polarization effect. The Chinese culture may be one of the possible explanations to this finding so that in public contexts people avoid displaying extreme opinions and judgments, and try to constrain them from influence of strong affects, either positive or negative.

As to the distributive justice, no moderation effect of group context is found. This may be because of the biological finding that distributive justice is more related to the activation in emotional areas of the brain (Dulebohn et al., 2009). That is to say, the relationship between affect and distributive justice is relatively robust and is less influenced by contextual factors, so that distributive justice will still be influenced by subjects' affective states even in a group context. Another explanation comes from the relative higher personal relevance for distributive justice ($M = 5.82$) than procedural justice ($M = 5.13$) and interactional justice ($M = 5.15$). This comparison suggested that participants perceived the distributive justice as more personally relevant than procedural justice and interactional justice, so that their opinions on distributive justice would be less influenced by other people even they are in a group context and need to discuss with group members.

Despite these results, surprisingly, emotional control is found not to moderate any of the relationships between affect and justice perceptions. This may be because emotional control takes action better when the focal person has a need to control their emotions especially in making an important and big decision or judgment, while in the current study, the participants may not have such a need and that is why emotional control does not function as a moderator between affect and justice perceptions.

In addition to the insignificant results on emotional control, the current study found an effect opposite to the hypothesized direction. That is, the influence of positive affect on justice perceptions is found to be stronger than that of negative affect. This might be due to the fact that people in general avoid negative affect and it is possible that they intentionally try to remember positive affect and forget negative affect. In the organizational context, it is wise to display and keep positive mood. As long as an employee wants to stay in the organization and work with his or her supervisor, he or she may want to remember the positive aspects rather than the negative ones for their organization and supervisor, in order to have an easier life in the workplace.

Several limitations call for cautious interpretations of the current study. For example, the alpha reliability of some measures is lower than .70 especially for the justice measures in group context. This is understandable because when the participants interact in a discussion to make some group-consensus perceptions, the reliability across people might be lower through the process of persuasion and compromising. When a person make his or her own perception, it is more likely that he or she can do the judgment in a more consistent way. Moreover, this study used a student sample, which may constrain the generalizability of the results to an organizational setting, particularly in testing the moderation effect of group context on organizational justice. Although the measurement items have been adjusted to suite the context of school—justice perceptions towards the

university and the instructors—this seems inadequate to conclude that the findings could be extended to the real organizational settings. However, this experimental design is a reasonable way to test the ideas of the affective influence on justice perception formation. Cross-validation is needed for sure. This is why study 2 was conducted, with an employee sample to provide further and reliable evidence to the current findings.

6. Study 2

In the last chapter, an experimental study with student sample has been reported. In this chapter, the hypotheses were examined using an employee sample, in order to cross-validate the findings and enhance the generalizability of these findings from an experimental context into an organizational setting.

6.1 Sample Description

Data were collected from two organizations and finally 221 valid questionnaires were returned. Among all the subjects, 186 employees were from a large textile chemical fiber manufacturing company in a southern city of China. This company is established in 1986 and produces a series of fiber products, including wet wipe, nonwowen goods, cleaning wipe/cloth, filter material, nonwoven roll goods, sponge products, and apparel fittings. Half of these employees were male and the other half were female. Most of this sample (82.6%) were manufacturing employees, 6.7% of this sample worked as clerical staff, and the rest (10.7%) of the subjects were team leaders, or technicians. Eighty-eight point one percent of these employees had education of secondary school and high school, and 7.9% of them had associate degree or entered university, and 4% of them only attended primary school. In terms of age, most of them (80.9%) were under 35.

Another organization is the Labor Department of Hong Kong SAR, which is responsible for employee services, employee rights, occupational safety and health, etc. These employees were mostly frontline staff that provide job matching and consultation services. Of these 35 employees, 75% were female and 25% were male. Nearly half of them (52.6%) were under 35 and most of them (64%) had high education, including bachelor and master.

As a whole, these two sub-samples composed of the final sample of the current study. Of this sample, 53.5% were female and most of them (78.1%) were under 35 and the rest of them were between 36 and 56. In the final sample, 96.6% of them received high school education or above.

6.2 Experimental Design, Procedures and Manipulation

I adopted the same experimental design, procedures and manipulations as those in study 1. This was also a 2 (positive/negative affect)*2 (group/individual) mixed experimental design. The former one was between-subjects and the latter one was within-subjects. The participants received either positive or negative affect manipulation, while they completed the measurements of justice both by themselves and on the basis of group discussion. Finally, 106 of the employees were in the negative affect manipulation condition while 115 were in the positive affect manipulation condition. The manipulation was the same as in study 1, that is, the employees were asked to recall an event which made them happy or unhappy.

The procedures were much the same as study 1 as well except for the manufacturing employees. Since the educational level for the manufacturing employees was very low, in case that some of them may have difficulty in understanding the items, I arranged less than 20 employees per time slot, so that I could explain to them in a more detailed way. In addition, one-to-one assistance was possible. By so doing, I made sure the employees answered questions with necessary understanding on the items.

6.3 Measures and Analytical Strategies

All the measurements (including manipulation checks, PANAS, distributive justice, procedural justice, interpersonal justice, informational justice, emotional control, positive

affectivity, negative affectivity, personal relevance, and demographical information) were the same with those used for the student sample in study 1, with the following exceptions. First, I adjusted the items so that they fit the context of organizations. Second, I dropped one item in measuring distributive justice in study 1, which is "my outcome reflects what I have contributed to the organization" since this did not suit the context of university students. This item was added back in the current study so that the four original items (Colquitt, 2001) were used to measure distributive justice. Third, I did not measure interactional justice in the group sheet for the current study. Participants in a group were from the same organization so that they can discuss about distributive justice and procedural justice with their group members because these two types of justice perceptions are organization-focused. However, participants in the same group do not necessarily have the same supervisors so that it didn't make sense to ask them to discuss over interactional justice toward different target supervisor. On the contrary, in the student sample, students in the group had the same instructor to be evaluated in terms of interactional justice. Fourth, two additional control variables were included, which are organization and education.

The analytical strategies were much the same. CFA was to make sure of the factor structure of the variables under study, and ANOVA will be used to examine the manipulation checks. Finally, ANOVA, hierarchical regression, and GLM with repeated measures will be conducted to test the hypotheses. There is only one exception. When I conducted hierarchical regressions to test the hypothesized moderation effects, I entered control variables in step 1. In the current study, I added organization (the organization in Shenzhen coded as 0 and the organization in Hong Kong coded as 1; the comparison between the two sub-samples were compared and the results were reported below) and education as two more control variables, in addition to age, gender, positive affectivity,

and negative affectivity.

6.4 Results

6.4.1 Correlations

Table 9 showed the means, standard deviations, inter-correlations and reliabilities of the study constructs. Two types of correlations were reported. Those below the diagonal were correlations among the variables and those on the diagonal were reliabilities of the measurements.

Variables between the two samples of study 1 and study 2 were compared. It seems that employees have more tolerance and satisfaction with the justice of their organization and they give significantly higher ratings to procedural justice and distributive justice than their student counterparts in study 1. Students were also found to care the distributive higher than employees, showing that the GPA was highly important to them. However, students showed higher informational justice than the employee samples. Another interesting finding is that students were found to be high on negative affectivity, referring that they are more likely to feel negative and more easily to be aroused emotionally. Consistently, their scores on emotional control were significantly lower than employees, suggesting that when encountering emotionally stressful events, they are less capable to control their emotions than the employees.

Generally speaking, compared to employee participants in the current study, student participants in study 1 were more dissatisfied with the distribution and procedures of their university while relatively pleased with their instructors. They care GPA more than employees care salary. Maybe through socialization and personal growth, employees are more likely to feel in a positive way and better deal with the emotional events than the student participants.

The comparison between the two sub-samples from Shenzhen and Hong Kong in study 2 was also conducted. It is showed that they differed from each other in the following two variables, namely procedural justice and personal relevance of interactional justice. Specifically, employees in Shenzhen perceived higher procedural justice (M = 4.61) than those in Hong Kong (M = 4.15). In addition, employees in Hong Kong deemed interactional justice as more relevance and important to them (M = 5.20) than those in Shenzhen (M = 5.12). This may be due to the different expectations of the employees. Employees in Hong Kong have more opportunities to be aware of the responsibility of the organization, thus setting higher expectation of a fair procedural system. Therefore, they are more likely to find the discrepancy between the organizational practices and their idealized fair procedures, leading to relatively lower perception on procedural justice. They also emphasize their rights to be treated with respect. In contrast, employees in Shenzhen received less education and their main objective is to earn more money to make a better living, emphasizing less in the procedures and downgrading the importance level of interactional justice. Thus it is more likely to find the organizational practices meet their expectation which is not high. Due to these differences, the dummy variable representing the organization (0 for Shenzhen and 1 for Hong Kong) was controlled in the subsequent regression analysis.

6.4.2 Factor Analysis

As showed in Table 10, the nine-factor achieved χ^2 (1133) = 3222.75, RMSEA of .08. Its χ^2/df equals to 2.84, which is acceptable according to Iacobucci (2010). I then performed the Harman's one-factor test by loading all items to one factor and see whether this model fit the data well. The results showed poor model fit with χ^2 (1175) = 5091.54, RMSEA of .13 and χ^2/df>3. In comparison, our proposed nine-factor model was more

acceptable.

Table 9 Descriptive Statistics and Pearson Correlations

Variables	mean	s.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. procedural justice	4.53	0.92	.65													
2. distributive justice	4.67	1.25	.34***	.81												
3. interpersonal justice	4.95	1.21	.42***	.51***	.82											
4. informational justice	4.95	1.01	.52***	.53***	.64***	.72										
5. positive affective state	3.69	0.55	.27***	.17**	.35***	.28***	.72									
6. negative affective state	2.34	0.62	-.08	-.15**	-.20***	-.06	-.19***	.75								
7. PR of distributive justice	5.11	1.31	-.04	.01	.06	.02	-.01	.06	.67							
8. PR of procedural justice	5.13	1.12	.06	.13*	.13*	.07	.06	.11	.46***	.51						
9. PR of interactional justice	5.13	1.06	-.00	.08	.14**	.16**	.05	.06	.44***	.46***	.56					
10. emotional control	5.02	1.13	.33***	.27***	.29***	.31***	.21***	.06	-.05	.17**	-.01	.84				
11. group procedural justice	4.44	0.87	.26***	.09	.11*	.11	.02	-.03	-.03	.10	-.02	.24***	.73			
12. group distributive justice	4.14	1.27	.18***	.34***	.20***	.16**	-.01	-.16**	-.07	.10	.07	.18***	.46***	.88		
13. positive affectivity	3.88	0.72	.22***	.23***	.32***	.31***	.22***	-.05	.19**	.17***	.14**	.17**	.08	.02	.65	
14. negative affectivity	3.02	0.79	-.04	-.04	-.02	-.09	-.02	.05	.08	.07	.03	-.22***	-.05	.06	-.06	.70

* $p < .10$; ** $p < .05$; *** $p < .01$; PR = personal relevance

Two-tailed tests.

Table 10. Results of confirmatory factor analysis of the measurement models

Models	χ^2 (df)	RMSEA	χ^2/df
1-factor Model[a]	5091.54 (1175)***	.13	2.84
9-factor Model	3222.75 (1133)***	.08	4.33

Notes: ***$p < .01$

6.4.3 Manipulation Checks

ANOVA was conducted to test whether the experimental manipulation was affective to arouse subjects' positive/negative affect. The results showed significant difference in both the manipulation check item "at this moment, I feel very happy" with $F(1, 220) = 8.92$, $p < .01$, and "I feel very good right now" with $F(1, 220) = 3.99$, $p < .05$. The participants felt happier ($M = 5.48$) and better ($M = 5.31$) in the positive condition, than they did in the negative condition ($M = 4.78$; $M = 4.63$, respectively). This suggested that the manipulation of affective states worked in the current study. Further evidence for the effective manipulation came from the ANOVA results of the PANAS which directly measured the positive and negative affective states of the participants. The findings showed that participants experienced significantly [$F(1, 220) = 8.92$, $p < .01$] positive affect in positive condition ($M = 3.79$) than those in negative condition ($M = 3.57$). In the same vein, participants experienced significantly [$F(1, 220) = 3.99$, $p < .05$] more negative affect in negative condition ($M = 2.43$) than those in positive condition ($M = 2.26$).

6.4.4 Hypotheses Testing

In hypothesis 1 and 2, two main effects were argued that positive affect should be

associated with higher justice perceptions, including distributive justice, procedural justice, interpersonal justice, and informational justice, while negative affect should be associated with lower justice perceptions above. ANOVA suggested that H1 and H2 were supported, with significant results concerning distributive justice $F(1, 220) = 12.03$, $p < .01$, procedural justice $F(1, 220) = 6.21$, $p < .05$, interpersonal justice $F(1, 220) = 9.89$, $p < .01$, and informational justice $F(1, 220) = 5.29$, $p < .05$. In particular, participants in positive condition perceived higher distributive justice ($M = 4.95$), procedural justice ($M = 4.68$), interpersonal justice ($M = 5.19$), and informational justice ($M = 5.10$) than those in negative condition ($M = 4.38$; $M = 4.38$; $M = 4.69$; $M = 4.79$, respectively).

Hypothesis 3 proposed the stronger influence of negative affect on justice perceptions. Again the differences in the regression coefficients that represent the effect of positive affect and negative affect on justice perceptions was examined with an A-matrix hypothesis test using SYSTAT 10.1 (Dwyer, 1983). This test allows us to examine whether or not a regression coefficient differs from another (for details, see Dwyer, 1983). Interestingly, significant differences were found for the effect of positive affect and negative affect on procedural justice with $F(1, 170) = 3.24$, $p < .10$, interpersonal justice with $F(1, 170) = 6.16$, $p < .05$, and informational justice with $F(1, 170) = 7.50$, $p < .01$, though not in the hypothesized direction. That is, the findings suggest that positive affect seemed to exert more influence on the procedural justice and interactional justice perceptions. No significant result was found for distributive justice $F(1, 170) = 0.45$, $p > .10$. Thus Hypothesis 3, arguing that negative affect is more influential in justice perception formation than positive affect, was not supported.

Moderation effect testing. Hypotheses 4 and 5 proposed two moderation effects of emotional control and personal relevance on the relationships between affect and justice perceptions, including distributive justice, procedural justice, interpersonal justice, and

informational justice. I used three-step hierarchical regression to test these two hypotheses. In the first step, I entered control variables (positive affectivity, negative affectivity, gender, age, education, organization) into the equation, and in the second step, I added the main effect of affect and emotional control (affect and personal relevance). Finally I entered the interactional term of affect and emotional control (affect and personal relevance) in the step 3. The results were reported in the Table 11 and 12.

Table 11 is a summary of the moderation effect of emotional control on the relationship between affect and justice perceptions. As showed in Step 3 of the Table, this interactional term was not significant for interpersonal justice ($\beta = -.22, p > .10$) and informational justice ($\beta = .00, p > .10$), while this interactional term was significant for distributive justice ($\beta = .35, p < .05$) and procedural justice ($\beta = .21, p < .05$), however, opposite to the predicted direction, which means, when subjects have higher emotional control ability, their justice perceptions on outcome and procedures will be more affected by their affective states, thus rejecting hypothesis 4, arguing the buffering effect of emotional control on the relationship between affect and justice perceptions.

Table 12 summarized the moderation effect of personal relevance on the relationship between affect and justice perceptions. It showed that personal relevance significantly moderated the relationship between affect and procedural justice ($\beta = .32, p < .01$) and distributive justice ($\beta = .18, p < .10$), in the predicted direction. However, this interactional term was not significant for the relationship between affect and interpersonal justice ($\beta = -.01, p > .10$) and informational justice ($\beta = .05, p > .10$). That is to say, when participants in the current study care more about distributive justice and procedural justice their distributive justice and procedural justice perceptions were more influenced by their affective states. However, it seems interactional justice (i.e., interpersonal justice and informational justice) was related to affect in a robust way regardless of the degree of

personal relevance, thus supporting Hypothesis 5 partially. Figure 9 and 10 displayed the moderation effect of personal relevance on distributive justice and procedural justice.

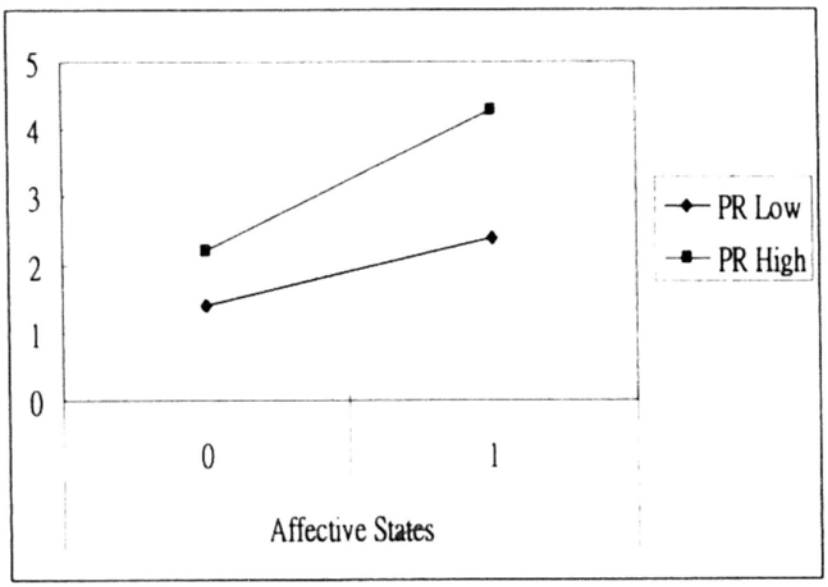


Figure 9. Moderation effect of personal relevance on procedural justice

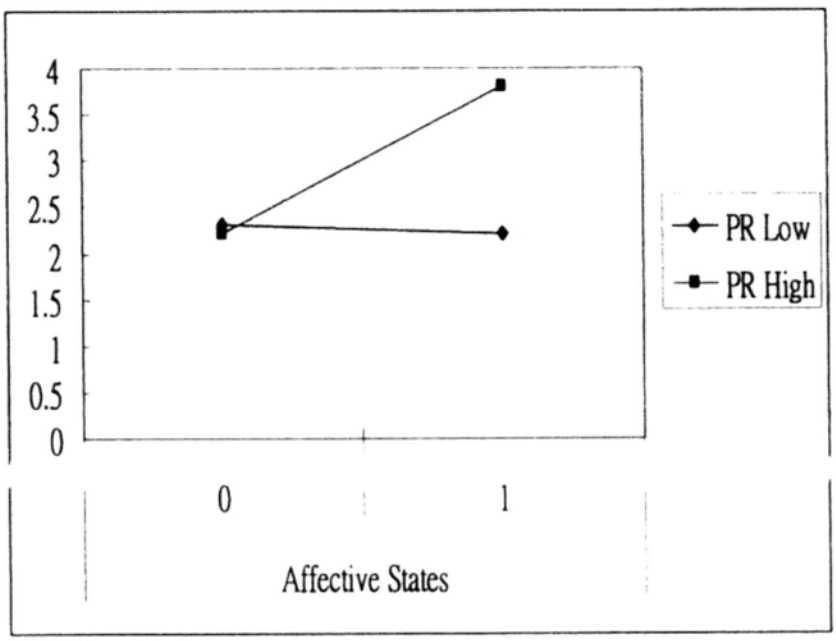


Figure 10. Moderation effect of personal relevance on distributive justice

Hypothesis 6 argued a positive polarization and negative inhibition effect for distributive justice and procedural justice, which involved a between-subjects variable (positive/negative affect) and a within-subject variable (individual/group). GLM-repeated measure was used to test this hypothesis. As in the study 1, the key to this examination is

to see whether the interactional term of affect and individual/group (I/G) is significant and can explain significant part of the total variance. Results in Table 13 showed that this interactional term was not significant for distributive justice, $F(1,172) = 1.67, p > .10$, but significant for procedural justice, $F(1,172) = 5.45, p < .05$. Further investigation suggested group inhibition effect in both positive and negative condition. That is, in the positive condition, the procedural justice perception was lower in group context (M_G = 4.46) than in individual context (M_I = 4.68); in the negative condition, the procedural justice perception was slightly higher in group context (M_G = 4.42) than in individual context (M_I = 4.37). This suggested that the participants constrained and controlled the influence of their affective states on justice perceptions when they were in a group. Figure 11 showed this moderation effect.

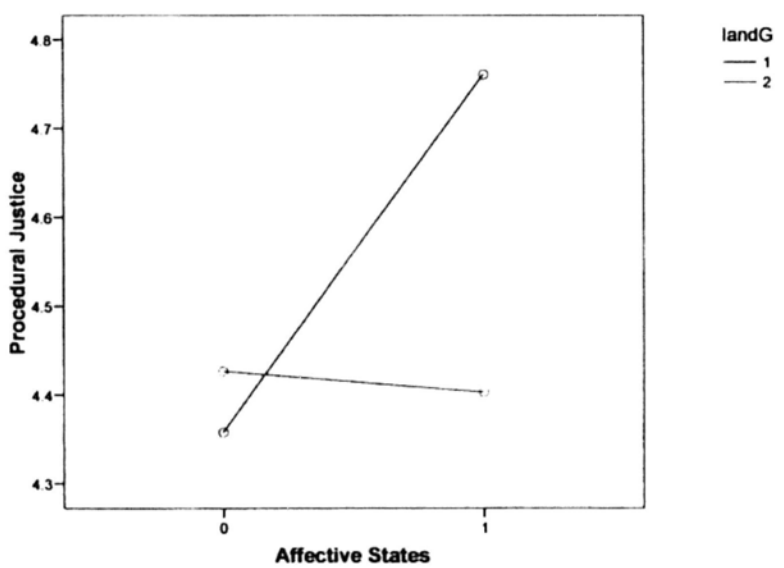


Figure 11. Moderation effect of I/G on procedural justice

Notes: IandG 1: individual; IandG 2: group context; 0: negative affective states; 1: positive affective states.

Table 11 Summary of Moderation Emotional Control on the Relationship Between Affect and Justice Perceptions

	Procedural Justice						Distributive Justice					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
Variable	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
Positive Affectivity	.31***	.09	.26***	.09	.22**	.09	.45***	.13	.39***	.12	.33***	.12
Negative Affectivity	-.05	.08	-.00	.08	-.03	.08	.00	.11	.03	.11	-.01	.11
Gender	.26*	.14	.03	.14	.01	.14	.32*	.19	-.02	.19	-.05	.19
Age	.01	.01	-.00	.01	-.00	.01	.01	.01	.00	.01	.00	.01
Education	-.06	.08	-.04	.07	-.04	.07	-.11	.10	-.09	.10	-.09	.10
Organization	-.63**	.28	-.67**	.27	-.61**	.27	.45	.39	.34	.37	.45	.37
Affect			.37***	.14	-.68	.55			.62***	.19	-1.13	.76
Emotional Control			.24***	.06	.13	.08			.25***	.08	.06	.11
Affect*Emotional Control					.21**	.11					.35**	.15
ΔR^2	.14***		.12***		.02**		.09**		.11***		.03**	

*$p < .10$; **$p < .05$; ***$p < .01$

Table 11 Summary of Moderation Effect of Emotional Control on the Relationship Between Affect and Justice Perceptions (continued)

	Interpersonal Justice						Informational Justice					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
variable	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
Positive Affectivity	.57***	.12	.51***	.12	.55***	.12	.43***	.10	.38***	.10	.38***	.10
Negative Affectivity	.04	.11	.08	.10	.10	.11	-.08	.09	-.04	.09	-.04	.09
Gender	.41**	.18	.13	.18	.15	.19	.37**	.14	.17	.15	.17	.15
Age	.02*	.01	.01	.01	.01	.01	-.00	.01	-.01	.01	-.01	.01
Education	.10	.10	.13	.09	.13	.09	-.01	.08	.01	.08	.01	.08
Organization	.16	.37	.08	.36	.01	.36	-.06	.30	-.11	.29	-.11	.30
Affect			.51***	.18	1.59**	.74			.34**	.15	.33	.61
Emotional Control			.25***	.07	.36***	.11			.20***	.06	.20**	.09
Affect*Emotional Control					-.22	.15					.00	.12
ΔR^2	.18***		.09***		.01		.14***		.08***		.00	

*$p < .10$; **$p < .05$; ***$p < .01$

Table 12 Summary of Moderation Effect of Personal Relevance on the Relationship Between Affect and Justice Perceptions

	Procedural Justice						Distributive Justice					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
Variable	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
Positive Affectivity	.31***	.09	.29***	.09	.26***	.09	.46***	.13	.48***	.13	.47***	.13
Negative Affectivity	-.05	.08	-.08	.08	-.07	.08	-.00	.11	-.03	.11	-.03	.11
Gender	.27**	.13	.09	.15	.10	.14	.31*	.18	.06	.20	.07	.20
Age	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01	.01
Education	-.06	.07	-.06	.07	-.05	.07	-.12	.10	-.11	.10	-.10	.10
Organization	-.63**	.28	-.73***	.08	-.72***	.27	.46	.39	.28	.38	.24	.38
Affect			.40	.14	-1.23	.60			.64***	.19	-.26	.70
Personal Relevance			.02	.06	-.14*	.08			-.08	.07	-.17*	.10
Affect*Personal Relevance					.32***	.11					.18*	.13
ΔR^2	014***		.04**		.04***		.09**		.06***		.01*	

*$p < .10$; **$p < .05$; ***$p < .01$

Table 12 Summary of Moderation Effect of Personal Relevance on the Relationship Between Affect and Justice Perceptions (continued)

	Interpersonal Justice						Informational Justice					
	Step 1		Step 2		Step 3		Step 1		Step 2		Step 3	
variable	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error	B	Std. Error
Positive Affectivity	.57***	.12	.56***	.12	.56***	.12	.43***	.10	.40***	.10	.40***	.10
Negative Affectivity	.04	.11	.01	.11	.01	.11	-.08	.09	-.11	.09	-.10	.09
Gender	.41	.18	.19	.19	.19	.19	.37***	.14	.20	.16	.21	.16
Age	.02*	.01	.02*	.01	.02*	.01	-.00	.01	.00	.01	-.00	.01
Education	.10	.10	.10	.10	.10	.10	-.01	.08	-.02	.08	-.02	.08
Organization	.16	.37	.03	.37	.03	.37	-.06	.30	-.18	.30	-.18	.30
Affect			.55***	.19	.60	.76			.33**	.15	.10	.62
Personal Relevance			-.02	.07	-.02	.10			.08	.06	.06	.08
Affect*Personal Relevance					-.01	.14					.05	.12
ΔR^2	.18***		.04**		.00		014***		.04**		.00	

*$p < .10$; **$p < .05$; ***$p < .01$

Table 13 Within-Subjects Contrasts of Moderation Effect of Group Context on the Relationship Between Affect and Justice Perceptions

	Procedural Justice			Distributive Justice		
	df	SS	F	df	SS	F
Affect*I/G	1	3.29	5.45**	1	1.75	1.67

*$p < .10$; **$p < .05$; ***$p < .01$

6.5 Discussion

This current study replicated the procedures and measurements in the previous study to empirically test the relationship between affect and justice perceptions as well the influences of the contextual factors. The difference and extension from the previous study is that an employee sample was used here so that direct evidence can be provided on whether the findings of the student sample can be generalized to the organizational context. Generally speaking, the results were comparable to the previous study, to a large degree.

All the main effects were confirmed in our predicted direction. Positive affect leads participants to give higher ratings and negative affect leads participants to give lower ratings on all justice types, including distributive justice, procedural justice, interpersonal justice, and informational justice. Profiting from the experimental nature, it is sufficient to conclude that there is a causal relationship between affect and justice judgments such that affect has a congruent influence on people's justice perceptions. That means, positive affect is positively related to justice perceptions while negative affect is negatively related to justice perceptions.

Besides these main effects, there were several other interesting findings on the

moderation effects of contextual factors. First, personal relevance is found to moderate the relationship between affect and distributive justice as well as procedural justice so that the influence of affective states on participants' distributive justice and procedural justice will be enhanced as the personal relevance increases. Consistent with the AIM, the more personal relevance the target is, the more people will seek for information available for judgment, and the more people's affective information (i.e., affective states) will be infused into their judgment. In the current study, if participants care more about the fairness of their outcome and procedures, they seek for more information in making a judgment on these two targets. This allows room for the information of affective states to infuse into people's judgment, which means that justice perceptions will be more congruent with their affective states. In positive affective states, they are going to take this as a piece of information into consideration and perceive higher distributive justice and procedural justice. The logic also applies for people in the negative affective states and they give even lower rating to distributive justice and procedural justice when the personal relevance is high.

Second, finding of the moderation effect of emotional control was contrary to the prediction which is emotional control should mitigate the influence of affective states on people's justice perceptions. However, it is found that the emotional control actually accentuated the influence of affective states on procedural justice and distributive justice. One possible explanation is that before people control their affect, they need to experience the affective states. This is why in the short run during the study, participants with higher emotional control ability experience higher degree of the affective state and process that more, compared with those with lower emotional control who experience this affective information less intensely. One element of emotional intelligence is emotional awareness (Mayer, DiPaolo, & Salovey, 1990; Wong & Law, 2002). Maybe

people with higher emotional control need to be able to more aware of their own affective states. That is why they process the affective information and their justice judgments were more influenced by their affect in the short run, compared with people who are less capable in emotional control. Therefore, people who process affective information more get their justice perceptions colored by their affective states more. This explains why the surprising results happened. But in the long time, as the literature of emotional intelligence predicted, people with stronger emotional control would be more capable with handling their emotions and moods in important decisions and judgments.

Third, it is found that in group context, the influence of negative affect was constrained in influencing procedural justice perceptions, which is what was predicted as negative inhibition effect. This fits well into the logic of AIM, which argues that when individuals have any specific and particular motive to pursue, the processing system will be narrowed down and allows little room for affective information to infuse into the judgment. Since individuals have a drive to maintain positive self-image in public where they are more aware of their negative affect, they will use the motivated processing strategy to make the judgment so that their procedural justice perceptions will be less influenced or not influenced by their negative affect. Interestingly, this inhibition effect also happened in positive condition, which means, when individuals are in positive affect, which is preferable generally, they still constrain its influence in public. This may be because in the eastern cultures, people are less likely to display extreme emotions in public and with presence of others. Therefore, in group context, people also constrain their positive affect and positive polarization did not happen in the current study. Again, consistent with study 1, there was no significant difference for the influence of affect on distributive justice in individual context and in group context.

Finally, in this employee sample, positive affect was found to exert more influential

impact on individuals' procedural justice, interpersonal justice and informational justice than negative affect, but not on distributive justice. This may be related to the nature of workplace, where employees stay with the organization and interact with their supervisors. Such experience becomes torture if employees stay with their negative affect for long. Therefore, employees may adjust themselves and put themselves into a positive affect while be motivated to withdraw themselves from a negative affect. Such attitude in workplace might explain why positive affect influence justice perceptions more than negative affect.

It is worth noting that interpersonal justice and informational justice were not measured in the group context in the current study, due to the reason I mentioned before. Therefore the hypothesis 6 was not fully tested.

6.6 Summary of Results of Study 1 and Study 2

Two experiments with student sample and employee sample were conducted. The majority of the findings were consistent across these two studies, while with minor difference. The following is a summary of the findings in common and findings that differ.

Both studies confirmed the hypothesis that positive affect leads to higher justice perceptions including distributive justice, procedural justice, interpersonal justice, and informational justice, and negative affect leads to lower justice perceptions above. Personal relevance is found to moderate the relationship between affect and distributive justice and procedural justice. Affect's influence on procedural justice seemed to be weakened in group context than in individual context. However, emotional control did not buffer the influence of affect on justice perceptions.

One difference between the findings across two studies is that in employee sample,

the positive affect exerted stronger influence on employees' justice perceptions than negative affect. There is no clear pattern for the student sample. It may be because in the workplace, employees stay in the organization and interacts with their supervisor. As long as they want to continue their career in the same organization, it is least likely for them to be "controlled" by their negative affect that they hate their organization and feel bad about their supervisor. On the contrary, if they continue to stay, employees may want to remember the good things and try to forget the bad things. That is why they may embrace the positive affect fully and let it lead them to perceive good facets about the organization and supervisor, such as higher distributive justice, procedural justice, interpersonal justice, and informational justice.

Another difference is that affect's influence on interpersonal justice and informational justice was constrained for student sample. However, these two justice types were not feasible to measure in employee sample, so that this cannot be compared.

For a summary of results that were found in Study 1 and Study 2, please refer to Table 14 below.

Table 14 Summary of Results

	Study 1	Notes	Study 2	Notes
H1	○		○	
H2	○		○	
H3	×		×	
H4	×		×	
H5	Φ	For PJ, DJ	Φ	For PJ, DJ
H6	Φ	For PJ, IPJ, IFJ	Φ	For PJ (IJ: N/A)

Notes:

○: supported; Φ: partially supported; ×: not supported

7. Discussion and Conclusions

It has been a key challenge for justice researchers to understand how people form their justice perceptions. Undeniably, previous research has been successful in revealing some mechanisms in this process, such as fairness theory (Foger & Cropanzano, 2001), equity theory (Adams, 1965) and so on. The assumptions underlying these approaches are that individuals are cognitive and rational in making the judgments of justice perception. However, this is not the whole picture of how individuals make justice judgment. The element of affect as an input for the process of justice perception formation is important but largely ignored in the existing justice research. The current study, conducting two experimental studies with both student sample and employee sample investigated the roles that affect plays in justice perception formation. Besides, a series of moderators were examined within the framework of Affect Infusion Model (AIM). Major findings and implications are discussed in the following sections.

7.1 Can affective states influence justice perceptions?

The current study based on the affect infusion model, hypothesized that affective states can influence individuals' justice perceptions. Two experimental studies, using students and employees as sample, provided strong evidence on this causal relationship. Specifically, people in positive affective states are likely to perceive higher distributive justice, procedural justice, informational justice, and interpersonal justice, compared to their counterparts in negative affective states.

The relationship between justice and affect is not a new topic in justice research, while the main argument is affect is an outcome to justice (Adams, 1965; Homans, 1961; Lind & Tyler, 1988; Williams, 1999). That is, injustice is likely to arouse individuals'

affective reactions, such as anger, guilt, resent, hurt, betrayal, anxiety, unhappiness, hostility, worry, etc., and there is a positive relationship between justice and happiness as well as satisfaction. The reverse side that affect may be one cause of justice perceptions, is largely ignored in the research and systematic investigation in this relationship is lacked. Though the student sample in study 1 may pose some restrictions in interpreting its findings when generalized to the organizational context, study 2 with employee sample not only confirmed the previous study, but also enhanced the generalizability of this finding. This is a very robust finding across samples.

7.2 Do negative affective states exert a stronger impact than positive affective states in influencing justice perceptions?

Negative affective states, signaling danger and abnormality, usually draw more attention of people than positive affective states. It is also noted that negative affective states vanish slower and last longer once they are formed. However, interestingly, this was not what the results turned out to be in the current study. Quite the opposite, in the employee sample, it is found that positive affect is more influential in impacting procedural justice and interactional justice. As speculated above, employees may monitor their own affective states and adjust their reactions to these affects so that they intentionally experience the positive affect and avoid the negative affect. This nature of workplace differs from the pure experimental setting and this difference might explain the finding that positive affect may exert a stronger impact than negative affect on justice perceptions in the workplace.

7.3 Does personal relevance matter?

Relatively few but one study by Forgas (1991) examined the role of relevance in the

relationship between affect and decisions on partner choice. In their study, personal relevance was manipulated by choosing the partner for others (low personal relevance) or choosing the partner for themselves (high personal relevance). In the current study, personal relevance was directly measured, in terms of the importance and relevance to the individuals. It is found that personal relevance moderated the relationship between affective states and distributive justice as well as procedural justice, so that when people perceive the outcomes and procedures as highly relevant and important to them, their justice perceptions concerning the outcomes and procedures will be more likely to be influenced by their affective states. However, this is not the case for interactional justice.

Much evidence has noted that individuals generally face more uncertainty in procedures of organizations than in interpersonal treatment of supervisors. This is because interactional justice is a judgment on the interpersonal basis, which happens every day in organizations. In contrast, procedures in organizations seem less clear and tangible than interactional justice. In the same vein, distributive justice, mostly involving social comparison, faces much uncertainty as well. It is much easier for employees to make a judgment of the interactional justice than procedural justice and distributive justice. According to AIM, the more familiar the target is, the more likely that people will adopt simple processing strategies and the less probable for affect infusion to take place. This may explain why moderation effect of personal relevance did not work for interactional justice perceptions.

7.4 Does emotional control buffer the influence of affect on justice perceptions?

Emotional control is not found to buffer the influence of affect on justice perceptions, which is against the hypothesis in the current study. Emotional control might work as a buffer better in the long run while in the short term emotional control facilitates

individuals to be aware of and process the information of affect. It is because emotional awareness and recognition and emotional control are not separable, so that in the short run individuals with high emotional control seem to be influenced more by affective states. It is speculated that given a longer time period, emotional control will be more efficient in helping employees "cool down" from the impact of their affective states, as what was found in the previous studies (Landy, 2005). In addition to this time concern, it might be because emotional control is especially effective in regulation on emotions, rather than moods, although it should be related to individuals' abilities to manage their moods (Ciarrochi, Chan, & Caputi, 2000). In the current study which involving moods and emotions, the effect of emotional control might be weakened or vanished.

7.5 Does it differ when people are in group context?

The answer to this question is yes. People restrained the impact of affect on justice perceptions in group context than on individual basis both when they are in positive affect and when they are in negative affect. This is because in a group setting, team members will interpret whether and which affects are appropriate to the expectation with the group context (Hatfield, Cacioppo, & Rapson, 1992, 1994). Usually in eastern cultures, it is deemed appropriate not to display extreme strong emotions and mood in public. This leads people to be careful when displaying their affective states and presenting their vulnerability to affective states when making a judgment in a group setting, or with the presence of other people. Within the framework of AIM, this resulted in motivated processing strategy, which means people have a particular goal to achieve and narrow down the need of information search. This automatically reduces the chance of affective information to infuse into the final judgment. Therefore, this leads to constrain of participants in controlling their justice perceptions from the influence of their

affective states.

7.6 Contributions

Dominant justice research focuses on the rational side of justice perception formation and the side of affect in organizations was under-studied (Weiss and Cropanzano, 1996). Though justice perceptions have been viewed from a rational and cognitive approach, both the daily experience and theoretical foundation points to the possibility that affect is an important element in forming justice perceptions, rather than the mere reactions to justice. While the extensive volume of justice research is bounded with the viewpoint that affective states are reactions to (in)justice in organizations, the role of affect in influencing organization justice perceptions is ignored. The current study responds to the call for more attention on the role of affect in organizations and employed a new perspective to investigate the process of justice perception formation.

The current study also furthers our understanding on the previously found linear relationship between affect and justice perceptions, which is positive affect is associated with higher justice perceptions and negative affect is associated with lower justice perceptions. Based on both AIM and emotional intelligence literature, three sets of contextual factors were identified, namely the feature of judge and the feature of context. These moderators shape a complete context in which affect influences justice perceptions. Rather than exerting a linear impact on justice perceptions, affect's impact is constrained on several sets of contextual factors. This is just a starting point to explore the potential contextual factors and the examination of them is in a systematic way.

Methodologically, the current study not only confirmed the findings previously found in the pure experimental setting, but also extended it to the organizational setting. With the experimental design, the causal relationship between affect and justice perceptions

can be established and the two samples from student sample and employee sample successfully cross-validated the findings of each other, further confirming and enhancing both the internal and external validity of the findings in the current study. The employee sample was from both a manufacturing factory and a government section, from both Shenzhen and Hong Kong. This span of sampling is valuable and is more representative.

7.7 Implications for practice

The first implication for practice is that affect does matter in organizations. Emotion researchers have strongly advocated the role of affect in organizations and indicate that organizational life is "saturated with emotion" (Ashforth and Humphrey, 1995, p. 97). Evolving from the school of scientific management emphasizing efficiency at the very beginning, contemporary management research has paid more attention to the growth and development of employees in organizations. Specifically, Weiss and Cropanzano (1996) were interested in investigating how employees experience the workplace and noted that affect can play an important role in shaping their attitudes and behaviors in workplace, such as job satisfaction, organizational citizenship behaviors. The current study indicates that employees' justice perceptions are also subject to the influence of their affective states. Given the grounded consequences of unjust perceptions, managers should pay more attention to the affective states of their employees, and cultivate the positive affect climate of the organization while at the same time open more channels for employees to release their negative emotions and moods.

The findings on the contextual factors also render some practical implications. Group context, personal relevance, and emotional control seem to moderate the influence of affect on justice perceptions. In this respect, managers can encourage more group interactions and social networking within the organization, because in such context,

individuals' vulnerability to affect will be reduced. In addition, it seems better for managers not to make employees feel that the justice issues are personal to them, so that employees can take a more neutral position to look into justice. The last resort is enhancing employees' capability in emotions, namely emotional intelligence, including emotional awareness, emotional control, and emotional usage. This is not only beneficial in forming affect-free justice perceptions, but also for their psychological well-being. This ability is especially meaningful and significant in the long run. It also benefits employees a lot when they are facing much stress.

7.8 Limitations of the study

There are no doubt more than one operationalization to represent the three sets of contextual factors, namely, features of objective, features of the judge, and feature of the context. Limited in time and resource, the current study only explores one possible operationalization of them. More manipulation methods of affect should also be tried in future research to cross-validate the findings of the current study. Some examples include Van den Bos (2003), Kohari and Lord (2007), Forgas and East (2008).

It is suggested that individuals' justice perceptions may differ in different organization types. Employees in different organizations have different expectations on outcomes, procedures, and interactional justice, as well as the affective states they would encounter in their workplace. In addition, organizational affective climate and culture may also differ across organizations. All of these would pose an impact in the results that could be found. It is definitely necessary to collect data from a variety of organizations, including the private enterprises, state-owned enterprises, and so on, in order to systematically investigate the underlying mechanism that leads to this difference.

The experimental design in the current study is not without restrictions either. For

example, in perfect randomization condition, students in each of the four classes should be randomly assigned to either positive or negative affect condition, while in the current study, in order to facilitate the class practice, two classes were assigned to positive affect condition and the other two were assigned to negative affect condition. However, in the university course selection system, students were randomly assigned to each class of the same course (if there is more than one session of a course). This actually mitigates the imperfect randomization of the current experiment. Nevertheless, studies with better randomization will lend stronger evidence and confidence in their findings.

Finally, the two samples in the current study were both from China, which may constrain the cross-cultural generalization. The expressions of emotions can be different across cultures (Law, Wong, & Song, 2004). For example, facing unreasonable demands, nonreactive and silent employees are considered as emotionally intelligent in China while this may represent cowardice in America. It is found in the current study that when in group context, individuals seem to intentionally decrease the influence of their affective states, both positive and negative, on their justice perceptions because this complies with the social desirability. However, such desirability may be different in other societies. It is possible that in the United States, both positive and negative affective states represent the feeling of each individual which was cherished and respected in the society, so that individuals do not feel such group pressure to constrain their own feelings in the group context. In such situations, it is more likely to find a polarization effect in groups that individuals' affective states were strengthened, which is opposite to what is found in the current study. Therefore, cautions are called when interpreting the findings of the current study and extending the conclusions to other cultures.

7.9 Future directions

More research needs to be done to explore the role of affect that plays in justice perception formation. The current study is just a starting point to do so. No doubt, more research should be done to enrich this body of knowledge. The following are just several streams of research that could be meaningful.

Research needs to be done to explore the possibility that affect type might play a role in influencing the relationship between affect and justice perceptions. Different categorizations on affect type were raised in affect research. Six clusters of basic emotions (Shaver, Schwartz, Kirson, and O'Connor, 1987) included anger, fear, joy, sadness, love, and surprise, are one of them. Thought anger and sadness are both considered as negative emotions, their impact on justice perceptions might be very different. More research should be dedicated on this issue.

Both moods and emotions are included and not differentiated in the current theoretical framework because the theoretical framework of AIM applies to both of these affect types. Researchers might feel interested in differentiating these two types to see whether and how these two affect types differ in influencing justice perceptions. This speculation is meaningful in that moods and emotions are different as mentioned in previous chapters in terms of duration, intensity and contents. Plenty of studies are needed to further our understanding of this difference which contributes to the completeness of whole picture of how affect influences justice perceptions.

More operationalizations are needed in order to further our understanding in the AIM framework under the organizational context. Organizations are a context-rich place, where hierarchies are nested, people are interacting, work contents are changing. This fact also varies from organization to organization, from time to time. This may make a difference in how we operationalize the feature of the context, the feature of the judge and the feature of the objective. Therefore, it is very important to examine a series of

different operationalizations to cross-validate the findings of the current study, and establish a complete body of knowledge on how these contextual factors influence the relationship between affect and justice perceptions.

Finally, since positive affect and negative affect are independent, not dependent on each other, they may happen at the same time. It will be interesting to look into the issue on what if positive affect and negative affect happen at the same time. How will this influence people's justice perceptions? For instance, what if people are happy about the outcome while angry with the enactment of their supervisor? Though emotional control does not show to be effective in moderating the relationship between affect and justice perceptions in the current study, will it be a good moderator in such a complicated case when positive affect and negative affect are intertwined? This may be a good direction to go.

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