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This study examined several consequences of applicants' expectations of organizational justice at multiple stages in a selection process. We assessed the justice expectations of 1,832 job applicants prior to their participation in a testing process and examined how these expectations influenced their pretest attitudes and intentions as well as their perceptions of the testing process. Results revealed that applicants with higher expectations of justice reported higher levels of pretest motivation and more positive job acceptance and recommendation intentions. Justice expectations were also positively related to applicants' perceptions of justice in the testing process. Results also provided some evidence that justice expectations have a moderating influence, such that justice perceptions have a greater influence on applicants' affective and cognitive states when expectations of justice are high. The theoretical and practical implications of these findings are discussed in the context of research on organizational justice and applicant perceptions.

## **Keywords**

organizational justice, job applicants, testing, expectations, selection

## **Disciplines**

Social and Behavioral Sciences

## **Comments**

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RUNNING HEAD: JUSTICE EXPECTATIONS

Consequences of Organizational Justice Expectations in a Selection System

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## Abstract

This study examined several consequences of applicants' expectations of organizational justice at multiple stages in a selection process. We assessed the justice expectations of 1,832 job applicants prior to their participation in a testing process and examined how these expectations influenced their pretest attitudes and intentions as well as their perceptions of the testing process. Results revealed that applicants with higher expectations of justice reported higher levels of pretest motivation and more positive job acceptance and recommendation intentions. Justice expectations were also positively related to applicants' perceptions of justice in the testing process. Results also provided some evidence that justice expectations have a moderating influence, such that justice perceptions have a greater influence on applicants' affective and cognitive states when expectations of justice are high. The theoretical and practical implications of these findings are discussed in the context of research on organizational justice and applicant perceptions.

### Consequences of Organizational Justice Expectations in a Selection System

The generation of expectations, which can be defined as beliefs about a future state of affairs, represents one of the most fundamental and important psychological functions (Olson, Roese, & Zanna, 1996). Our assumptions about the future underlie virtually all our behavior and also have affective, cognitive, and physiological consequences. The pervasiveness of expectations is highlighted by the fact that the concept has been used to understand a broad array of phenomena, including placebo effects (e.g., Ross & Olson, 1981), depression (e.g., Abramson, Metalsky, & Alloy, 1989), and self-fulfilling prophecies (e.g., Miller & Turnbull, 1986).

Within the organizational justice literature, recent research has proposed that individuals generate expectations about the fairness of future organizational outcomes, procedures, and interpersonal exchanges, and these expectations of justice may influence how individuals perceive and react to organizational events (e.g., Bell, Ryan, & Wiechmann, 2004; Brockner, Ackerman, & Fairchild, 2001; Shapiro & Kirkman, 2001; Steiner, 2001). Social psychological research provides a strong theoretical foundation for these arguments (Olson et al., 1996), and some initial empirical support has been presented by Shapiro and Kirkman (1999), who found that expectations of distributive justice were related to employees' reactions to an organizational change effort. Yet, more research is needed to better understand the consequences of individuals' expectations of justice in the workplace.

This study examines several consequences of individuals' expectations of justice in a selection context. Research has shown that individuals engage in predictive activity when faced with unfamiliar or uncertain situations (Dutton & Duncan, 1987; Shapiro & Kirkman, 2001), suggesting that justice expectations may be prevalent in selection settings. In addition, previous work has suggested that expectations may serve as a key factor in shaping applicants' reactions

(e.g., Derous, Born, & DeWitte, 2004; Gilliland 1993, 1994). In particular, Bell et al. (2004) recently proposed a theoretical model that outlines the potential consequences of justice expectations for applicant perceptions. The current study builds on this work by empirically testing several of the model's propositions. Consistent with recent calls for research on applicant perceptions and intentions at different stages of the selection process (e.g., Ployhart & Ryan, 1998; Ryan & Ployhart, 2000), this study examines how justice expectations relate to applicants' pretest attitudes and intentions as well as their perceptions of the testing process. In addition, we examine justice expectations as a potential moderator of the relationship between applicants' perceptions and their affect and cognition during the testing process (Brockner et al., 2001; Steiner, 2001).

### *Organizational Justice Expectations*

Organizational justice is the study of fairness within organizational settings and originates from work in social psychology aimed at understanding fairness issues in social interactions (Greenberg, 1990). Recent research suggests that justice perceptions are most aptly conceptualized along four dimensions: (a) the fairness of outcome distributions, distributive justice; (b) the fairness of procedures used to determine outcome distributions, procedural justice; (c) the quality of interpersonal treatment received when procedures are implemented, interpersonal justice; and (d) the adequacy of information conveyed about why procedures were used a certain way or how outcomes were determined, informational justice (e.g., Colquitt, 2001). Research has shown that these perceptions influence a variety of important organizational outcomes (Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001).

Cropanzano, Byrne, Bobocel, and Rupp (2001) note that recent research has made considerable progress in understanding how justice evaluations are formed. In particular, they

highlight work that has provided insight into the role of automatic, as compared to more controlled or deliberate, processing in formation of justice perceptions. Specifically, it has been shown that when faced with novel or uncertain situations individuals will often rely on information readily available to make quick and efficient judgments, rather than carefully and consciously evaluating all available information (e.g., Lind, Kray, & Thompson, 2001; van den Bos, Lind, & Wilke, 2001). Recently, Shapiro and Kirkman (1999, 2001) argued that one source of information that may be utilized in making these more automatic judgments is individuals' expectations of justice. They contend that individuals attempt to anticipate future treatment in an effort to cope with the inherent uncertainty and unpredictability of organizational events, and these anticipations or expectations, in turn, shape individuals' perceptions of justice. In the current study, we empirically test this proposed relationship between individuals' expectations and perceptions of justice.

Shapiro and Kirkman (2001) suggest that the consequences of individuals' expectations of justice may go beyond justice perceptions to include many other organizational attitudes and behaviors. Indeed, past research in various domains has shown that expectations have pervasive attitudinal and behavioral consequences (for reviews see Higgins & Bargh, 1987; Miller & Turnbull, 1986; Olson et al., 1996). Some initial support is provided by Shapiro and Kirkman (1999), who found that expectations of distributive justice surrounding an organizational change effort were positively related to organizational commitment and negatively related to employee resistance and turnover intentions. The current study extends this research to the selection context, and examines the effects of not only distributive justice expectations but also procedural, interpersonal, and informational justice expectations on applicants' attitudes and intentions.

*Consequences of Organizational Justice Expectations in Selection Contexts*

*Pretest attitudes and intentions.* The fact that justice expectations are generated prior to an event and are therefore readily available when forming initial impressions suggests that they may play a significant role in shaping applicants' pretest attitudes and intentions. Research has shown that individuals tend to exhibit greater levels of motivation when they have more favorable expectations about valued outcomes (e.g., Ajzen & Fishbein, 1980; Vroom, 1964). Gist and Mitchell (1992), for example, suggest that self-efficacy is determined, in part, by an assessment of task requirements and an analysis of one's capability to meet those requirements. Expectancy theory also suggests that individuals will exhibit higher levels of motivation when they believe that effort will lead to higher levels of performance and rewards (Vroom, 1964). When individuals have negative expectations about the fairness of a selection process, they may perceive a lower likelihood of occurrence of valued outcomes (e.g., being hired) and, as a result, exhibit lower levels of self-efficacy and motivation (Gilliland, 1993). For example, an applicant who has formed an expectation that being hired at an organization is based on who you know, not what you know, may exhibit lower levels of test-taking efficacy and motivation.

Research has also demonstrated that people tend to behave in ways consistent with their expectations (Olson et al., 1996). Expectations represent our assumptions about how the world operates, and these assumptions guide behavioral choices. Bandura (1982), for instance, argues that individuals choose tasks on which they have high self-efficacy expectations. Robertson and Smith (1989) suggest that individuals often use the selection process as an opportunity to try to predict the treatment they will receive as a future member of an organization. Thus, an applicant who enters a selection process with low expectations of justice may perceive a job as less attractive than an applicant with higher expectations of justice, and this negative perception may



manifest in weaker intentions to accept the job or recommend it to others (e.g., Bauer, Maertz, Dolen, & Campion, 1998; Gilliland, 1994; Smither, Reilly, Millsap, Pearlman, & Stoffey, 1993).

Based on the arguments presented above, we predicted the following:

*Hypothesis 1: Applicants' expectations of justice will be positively related to their test-taking efficacy and motivation and their intentions to accept and recommend the job.*

*Justice perceptions.* Research has shown that individuals are biased in their need to confirm their expectations and, as a result, tend to selectively attend to and seek out information that confirms their expectations and ignore information or dismiss opportunities which would disconfirm their expectations (Higgins & Bargh, 1987; Fiske & Taylor, 1991). For instance, an individual who expects to be treated unfairly in a selection process may be more likely to notice procedural violations, such as inconsistencies in administration. In addition, expectations have been shown to influence how information is encoded and processed. Specifically, information tends to be interpreted in line with expectations rather than as opposing expectations (Darley & Gross, 1983; Duncan, 1976). This research suggests that applicants' expectations of justice may influence their perceptions of justice in the testing process. As Shapiro and Kirkman (2001) argue, "those who *anticipate* injustice are more likely than those who don't to *see* injustice" (p. 156, italics in original). Also, Stevens (1997) found evidence of confirmatory information processing in that applicants who expected to receive job offers evaluated their recruiters more positively, regardless of objective recruiter behavior. Truxillo, Steiner, and Gilliland (2004) argue that "research should include applicants' expectations among the perceptions measured early in the process to assess their role in later applicant reactions" (p. 44). Yet, as Lievens, van Dam, and Anderson (2002) note, most studies in the applicant perceptions area assess only post-process perceptions, providing little insight into how expectations relate to perceptions measured

after participation in the process. Based on this evidence, we predicted the following:

*Hypothesis 2: Applicants' expectations of justice will be positively related to their perceptions of organizational justice in the testing process.*

*Moderating influence of justice expectations.* Past research suggests that applicants' perceptions of justice may influence their affective and cognitive state during a testing procedure (Ryan & Ployhart, 2000). For example, Martin and Nagao (1989) found that applicants who judged interview procedures as unfair reported more negative affective reactions. Gilliland (1993) also suggests that when a test violates perceptions of justice, motivation to complete the test may be low. Past research suggests that when individuals believe that effort is unlikely to translate into desired outcomes, they are more likely to disengage from a task (Sandelands, Brockner, & Glynn, 1988). This disengagement can manifest as physical removal from a task, but in many situations may take the form of psychological withdrawal (i.e., more off-task thoughts and less cognitive effort) (Kanfer, Ackerman, Murtha, Dugdale, & Nelson, 1994). Based on this prior work we predicted that applicants with lower perceptions of justice would have higher levels of negative affect and psychological withdrawal.

Although applicant perceptions research has typically examined the direct effect of perceptions on various outcomes, the complexity of real-world selection settings suggests that moderators likely exist (Ryan & Ployhart, 2000). Brockner et al. (2001) argue that one moderating influence on the effects of justice elements is what people believe will happen (i.e., their expectancies). They argue that high expectations of justice give justice elements greater legitimacy and, therefore, cause justice perceptions to have more of an influence on people's attitudes and behaviors. This moderating effect may be explained by two phenomena. First, individuals generally respond negatively to the disconfirmation of expectancies (Mandler, 1975;

Olson et al., 1996). More importantly, research suggests that individuals react more strongly to negative, as opposed to positive, expectation-event discrepancies (Brockner et al., 2001). Thus, individuals with high expectations of justice may exhibit strong negative reactions to perceived injustice (Brockner, Ackerman, Greenberg, et al., 2001; Brockner, Tyler, Cooper-Schneider, 1992). Second, because individuals want to be able to predict the world, the confirmation of subjective expectations generally produces positive affect (Mandler, 1975). This is particularly true when individuals possess positive expectations, as confirmation of negative expectations is likely to lead to secondary negative affect (e.g., anxiety, depression) based on the inferences that occur after the confirmation (Olson et al., 1996). Thus, individuals' may exhibit strong positive reactions when their high expectations of justice are confirmed by perceptions of fair treatment (Cherry, Ordóñez, & Gilliland, 2003). Based on this evidence, we propose the following:

*Hypothesis 3: Applicants' expectations of justice will moderate the relationships between their justice perceptions and negative affect and psychological withdrawal, such that these relationships will be stronger when individuals have high expectations of justice.*

## Method

### *Procedure*

This study was conducted in conjunction with the firefighter selection process in a mid-sized Midwestern city. The application period lasted for two weeks and applications were made in person. The pre-test survey, completed at the time of application, focused on the first stage of the selection process, which was a written ability test that was given two weeks after the close of applications in one large session at the local convention center. After taking the test, individuals were asked to complete our post-test survey.

### *Participants*

There were 1,989 applicants for the firefighter positions. The demographic makeup of the applicant group was: 83.3% male, 16.2% female, .6% chose not to identify gender; 68.0% Caucasian, 21.5% African American, 6.0% Hispanic, 2.4% Other, 2.1% chose not to identify race; and 52.5% were 18 to 25 years old, 30.1% were 26 to 30 years old, 16.8% were 31 to 35 years old, .7% chose not to identify age. The firefighter position had an upper age limit of 35 for application. At the time of application, usable pre-test survey data was collected from 1,832 individuals (92.1% of applicants). Those completing the measure did not differ significantly in race, gender, or age from the total applicant sample. The written ability test was administered to 1,159 individuals (58.3% of applicants). Usable post-test data was obtained from 788 individuals (68.0% response rate). Individuals who provided usable post-test survey data did not differ in their demographic composition from the total examinee sample.

### *Pre-test Measures*

All measures in this study utilized a 5-point Likert scale (1 = *strongly disagree* to 5 = *strongly agree*). Internal consistency reliabilities are shown in Table 1.

*Organizational justice expectations.* Applicants' expectations of organizational justice in the testing process were measured by adapting the scales developed by Colquitt (2001). We measured the four dimensions of procedural justice (4 items; e.g., "I expect that the procedures will be applied consistently"), distributive justice (3 items; e.g., "I expect that my test score will be justified, given my performance"), interpersonal justice (3 items; e.g., "I expect that the test administrators will treat me with respect during the testing process"), and informational justice (4 items; e.g., "I expect that the City will explain the testing procedures thoroughly"). Confirmatory factor analysis (CFA) revealed good support for the four-factor model of justice expectations,

$\chi^2(71, N = 788) = 239.54, p < .01; IFI = .98; CFI = .98; RMSEA = .056 (.049, .064).$ <sup>1</sup>

*Test self-efficacy.* Applicants' test self-efficacy was measured using five items developed by Pintrich and DeGroot (1990). This scale assesses the extent to which individuals feel they can handle the challenges presented by the test and do well. An example item is "I am confident that I will receive a high score on the upcoming test."

*Test-taking motivation.* This was assessed using the multidimensional Valence, Instrumentality, Expectancy Motivation Scale (VIEMS) developed by Sanchez, Truxillo, and Bauer (2000). Valence consists of three-items that assess the attractiveness of obtaining the job (e.g., "I would like to be hired for this job"). Instrumentality uses four items to assess whether applicants feel doing well on the test will lead to being hired (e.g., "The higher my test score is, the better my chance of being hired"). Expectancy consists of three items that measure an applicant's belief that trying to do well on the selection test will lead to a high score on the test (e.g., "If I try to do my best on this test, I can get a high score"). Although Vroom's (1964) original expectancy theory calculated motivation as a multiplicative function of valence, instrumentality, and expectancy, a meta-analysis by Van Eerde and Thierry (1996) advocated the use of an additive model over any multiplicative models. Thus, as suggested by Sanchez et al. (2000), the test-taking motivation composite was computed by averaging the V, I, and E values for each participant (c.f., Nguyen, O'Neal, & Ryan, 2003).

*Intentions to accept and recommend job.* A single item adapted from Macan, Avedon, Paese, and Smith (1994) was used to assess applicants' intention to accept the job if offered ("I am willing to accept the job of firefighter if it is offered to me"). In addition, a single item adapted from Smither et al. (1993) was used to measure applicants' intention to recommend the job to others ("I would recommend that others apply for this job").

### *Post-test Measures*

*Organizational justice perceptions.* Applicants' perceptions of organizational justice in the testing process were assessed using the scales developed by Colquitt (2001). The items were tailored to fit the testing context and we measured the four dimensions of procedural justice (5 items; e.g., "The procedures were applied consistently"), distributive justice (3 items; e.g., "My test score will reflect the effort I have put into my work"), interpersonal justice (4 items; e.g., "The test administrators treated me with respect during the testing process"), and informational justice (5 items; e.g., "The City explained the testing procedures thoroughly"). A CFA showed that this four-factor model of organizational justice perceptions provided a good fit to the data  $\chi^2(113, N = 788) = 581.44, p < .01; IFI = .96; CFI = .96; RMSEA = .074 (.069, .080)$ .

*Self-assessed test performance.* This was assessed using a four-item scale developed by Sanchez et al. (2000). A representative item is "I believe I did well on the test I took today." Research has shown that the favorability of the outcome one receives has an influence on perceptions of the fairness of the outcome and the associated procedures (see Brockner & Wisenfeld, 1996). Thus, to provide a stringent test of the influence of justice expectations, we controlled for self-assessed test performance in analyses examining the relationship between justice expectations and justice perceptions. In this study, perceived test performance is a more appropriate measure of outcome favorability than objective (or actual) performance because individuals were not notified of their test scores until several weeks after the examination. Since we measured justice perceptions immediately following the examination, how individuals believed they performed should have a greater impact on their justice perceptions than their actual performance, which is supported by the pattern of correlations in Table 1.

*Psychological withdrawal.* The extent to which individuals withdrew psychologically

from the testing process was measured using a five-item measure of off-task thoughts developed by Kanfer et al. (1994). An example item is “I let my mind wander while I was taking the test.”

*Negative affect.* The degree to which individuals’ experienced negative, affect-based thoughts during the test was measured using three items adapted from Kanfer et al. (1994). A representative item is “I became frustrated with my ability to perform well on the test.”

### *Examination*

The written ability test consisted of three sections: (1) a reading passages test, which asks questions based on the training materials one would encounter in the fire academy or on the job; (2) a listening test, which requires applicants to answer questions after hearing a passage similar to the academy materials or job instructions read aloud; and (3) a spelling test. The City has established the criterion-related validity of the test.

### Results

Descriptive statistics and correlations among all variables are presented in Table 1. Prior research suggests that an individual’s background may impact his or her expectations of justice (e.g., Lam, Schaubroeck, & Aryee, 2002; Steiner, 2001). For example, Davidson and Friedman (1998) found that African American managers had higher levels of expected future injustice than White managers and researchers have also found gender differences in expectations of fair treatment (e.g., Brockner & Adsit, 1986; Major & Konar, 1984). Thus, we examined whether there were demographic differences in applicants’ expectations of organizational justice and these results are presented in Table 2. African American applicants had lower distributive justice expectations than Caucasian applicants ( $\beta = -.06, p < .05$ ), age exhibited a significant, negative relationship with applicants’ procedural justice expectations ( $\beta = -.07, p < .01$ ), and interpersonal justice expectations were higher among female applicants ( $\beta = .06, p < .05$ ). In light of these

significant findings, we controlled for applicants' race, age, and gender in all analyses.

Table 3 presents the results of hierarchical regression analyses that examined the relationship between justice expectations and applicants' pretest motivation and intentions. Both test-taking efficacy and test-taking motivation were significantly predicted by applicants' expectations of procedural, distributive, and informational justice. As hypothesized, applicants with higher expectations of justice reported higher levels of test-taking efficacy and motivation. Interpersonal justice expectations evidenced a significant, albeit weak, positive relationship with applicants' test-taking motivation, but did not significantly predict test-taking efficacy.<sup>2</sup> We also found that justice expectations explained a significant 49% and 27% of the variance in applicants' job acceptance and recommendation intentions. All the dimensions of justice expectations significantly predicted applicants' intentions, except procedural justice expectations which significantly predicted recommendation intentions but not job acceptance intentions. As expected, applicants with higher expectations of justice reported greater intentions of accepting the job if offered and recommending the job to others. Thus, Hypothesis 1 was mostly supported.

Table 4 presents the results of analyses that examined applicants' justice expectations as predictors of justice perceptions during the testing process. As hypothesized, the results revealed a positive relationship between applicants' justice expectations and their justice perceptions. Shapiro and Kirkman (2001) suggested that a halo-effect may emerge in which expectations of one type of justice influence perceptions of multiple justice elements. Our results, however, reveal that most of the significant expectation-perception relationships were observed within, rather than across, justice dimensions. Specifically, distributive justice expectations significantly predicted distributive justice perceptions ( $\beta = .18, p < .01$ ), but did not relate significantly to the other three dimensions of justice perceptions. Procedural justice expectations significantly



predicted applicants' procedural justice perceptions ( $\beta = .19, p < .01$ ) and informational justice perceptions ( $\beta = .10, p < .05$ ), but did not relate significantly to perceptions of distributive and interpersonal justice. Informational justice expectations significantly predicted informational justice perceptions ( $\beta = .13, p < .05$ ) and interpersonal justice perceptions ( $\beta = .11, p < .05$ ), but did not exhibit a significant relationship with applicants' perceptions of distributive or procedural justice. Only interpersonal justice expectations did not significantly predict applicants' justice perceptions. Thus, Hypothesis 2 was generally, but not entirely, supported.

The final set of hierarchical regression analyses, presented in Table 5, examined the direct and interactive effects of applicants' justice perceptions and expectations on their affect and cognition during the testing process. To limit the number of variables examined in these analyses, the interactions focused on matched pairings of expectations and perceptions (e.g., procedural expectations x procedural perceptions). Applicants' negative affect and psychological withdrawal were significantly related to perceptions of distributive and interpersonal justice, but not to perceptions of procedural and informational justice. As expected, applicants who perceived higher levels of injustice reported greater negative affect and psychological withdrawal from the testing process. Table 5 also shows that justice expectations had a significant, albeit modest, moderating influence on the relationship between applicants' interpersonal justice perceptions and these outcomes. It should be noted that interaction effects typically have small effect sizes and their significance tests often suffer from low power (e.g., Aguinis, 1995; McClelland & Judd, 1993). Given these challenges in detecting moderator effects, Evans (1985) stated that interactions that explain as little as 1% of the variance should be considered important. The interactions for negative affect and psychological withdrawal are shown in Figure 1 and Figure 2, respectively. Using the procedure outlined by Aiken and West

(1991, p. 18-19), we tested the simple slope of the regression lines shown in these figures. The simple slope analysis revealed that when applicants had low expectations of interpersonal justice, perceptions of interpersonal justice were not significantly related to negative affect ( $\beta = -.03, p > .10$ ) or psychological withdrawal ( $\beta = -.08, p > .10$ ). When applicants had high expectations of justice, there was a significant, negative relationship between perceptions of interpersonal justice and negative affect ( $\beta = -.20, p < .01$ ) and psychological withdrawal ( $\beta = -.22, p < .01$ ). Although these interactions were only observed for interpersonal justice, this pattern of results is consistent with Brockner et al.'s (2001) argument that justice is more impactful when individuals expect to encounter justice and provide some support for Hypothesis 3.

### Discussion

Overall, this study provides some initial evidence that applicants' expectations of justice may have a number of important consequences at different stages of the selection process. First, our results suggest that justice expectations may play an important role in shaping applicants' pretest attitudes and intentions. Applicants who had higher expectations of justice reported higher levels of test-taking self-efficacy and motivation and indicated a greater likelihood of accepting the job and recommending it to others. These results contribute to recent research demonstrating the importance of applicants' early impressions and intentions (e.g., Lievens & Highhouse, 2003; Ryan, Sacco, McFarland, & Kriska, 2000; Van Vianen, Taris, Scholten, & Schinkel, 2004) by highlighting justice expectations as one potential influence on applicants' initial perceptions of job attractiveness and test-taking attitudes.

We also found that applicants' expectations of justice were related to their perceptions of justice in the testing process. Applicants who had higher expectations of justice were more likely to perceive justice in the testing process. Derous et al. (2004) argue that "expectations and values

may be critical components in our understanding of applicant perceptions as they are considered the basic beliefs that guide people's lives" (p. 101). Our findings support this argument and identify justice expectations as one specific type of expectation that may serve as an important determinant of applicants' perceptions. At a broader level, these findings also make a theoretical contribution to research on organizational justice by providing empirical support for Shapiro and Kirkman's (2001) argument that individuals' perceptions of justice may result from expected, not just experienced, justice. One future research direction involves identifying the conditions under which individuals' justice expectations have more or less of an impact. For example, in situations where cognitive resources or time is limited or information that would facilitate central processing is not available, individuals may rely more heavily on their expectations to form justice judgments (Cropanzano et al., 2001; Shapiro & Kirkman, 2001).

This study also showed that applicants' perceptions of interpersonal and distributive justice were related to their affect and cognition during the testing process. Martin and Nagao (1989) have provided some previous evidence of the perception-affect link, but to our knowledge this study is the first to show that applicant perceptions can influence psychological withdrawal from the testing process (Kanfer et al., 1994). Perhaps more importantly, the present study provides some evidence that applicants' expectations of justice may have a moderating influence on these perception-outcome relationships. Specifically, we found that perceptions of interpersonal justice had a significant influence on negative affect and psychological withdrawal only when applicants had high expectations of justice. These findings provide support for Brockner et al.'s (2001) claim that justice matters more when people expect to be treated fairly. Yet, future research is needed to explore several issues surrounding these findings. First, Figures 1 and 2 suggest that high expectations of justice were associated with a positive confirmation

bias, but not a negative disconfirmation bias. This finding is contrary to several studies that suggest that legitimacy enhances reactions to perceived injustice (e.g., Brockner, Ackerman, Greenberg, et al., 2001; Brockner et al., 1992). Thus, future research is needed to further explore the implications of the confirmation and disconfirmation of high expectations of justice. Second, the fact that expectations moderated the effect of interpersonal but not distributive justice perceptions suggests that one direction for future research is to identify the boundary conditions for the moderating influence of justice expectations. Finally, future research should examine how these expectations influence the relationship between applicant perceptions and other important outcomes, such as applicants' job choice decisions.

One final finding worth noting involves the significant, albeit modest, relationships we observed between applicants' demographic characteristics and their expectations of justice. This finding is consistent with not only prior research showing that an individual's background may influence his or her expectations of justice (e.g., Davidson & Friedman, 1998; Lam et al., 2002) but also research linking personal characteristics to applicant expectations (Boyce, 2003; Chan, Schmitt, Sacco, & DeShon, 1998; Thibodeaux, Avis, & Kudisch, 2003). One important direction for future research involves identifying the antecedents of individuals' expectations of justice. Demographic characteristics, such as race, likely influence individuals' expectations of justice because they capture some between-group variability in past fairness experiences or belief systems (Derous et al., 2004; Davidson & Friedman, 1998). Thus, future research should directly examine how specific antecedents, such as prior experience, shape expectations of justice.

### *Limitations*

This study has several strengths, including a large field sample, direct measurement of applicants' expectations, and the assessment of applicants' attitudes and intentions at different

stages of the selection process. Nevertheless, some limitations should be noted. First, this study was conducted within a civil service organization, which may differ from the typical private organization. For example, civil service organizations have been noted for having highly standardized and transparent employment practices as well as the presence of strong affirmative action efforts (Ryan & Ployhart, 2000). However, these factors are likely to have only reduced the variance in justice expectations and, therefore, attenuated the effects observed in this research, suggesting that the consequences of justice expectations may be greater in organizations where there is greater ambiguity and uncertainty surrounding employment practices. Second, common method variance is a concern in research on applicant perceptions. In a meta-analysis of this literature, Hauscknecht, Day, and Thomas (2004) demonstrated correlations between perceptions measured at the same point in time were higher than those measured at separate points. The temporal separation between several of the variables examined in the current study (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003) and the nonsignificant relationships (e.g., cross-dimension expectation-perception links) suggest that an overall response bias does not account for the observed effects. Nonetheless, we conducted a series of analyses to examine whether common method bias may have influenced our data. Similar to previous research (Aquino, Lewis, & Bradfield, 1999; Sanchez & Brock, 1996; Sweeney & McFarlin, 1997), we used confirmatory factor analysis (CFA) to compare the fit of our measures against competing one-factor (i.e., influential common method factor) and two-factor (i.e., influential pre-test and post-test survey factors) models that would suggest common variance. Using the 788 applicants who provided usable pre- and post-test survey data, the CFA revealed good support for the seventeen-factor model,  $\chi^2(1576, N = 788) = 3252.17, p < .01$ ; IFI = .98; CFI = .98; RMSEA = .037 (.035, .039). In addition, the seventeen-factor model provided

significantly better fit to the data than a one-factor model ( $\Delta\chi^2 = 24307.77$ ,  $df = 134$ ,  $p < .01$ ) and a two-factor model ( $\Delta\chi^2 = 17550.08$ ,  $df = 133$ ,  $p < .01$ ). Combined, these results provide further evidence that common method bias did not have a substantial influence on the relationships examined in this research. A final limitation of this study is that we were unable to examine the role of expectations following feedback on the selection decision, where their influence might interact with the decision outcome.

### *Practical Implications*

Given the impact that justice perceptions can have on a range of important outcomes, organizations have a vested interest in trying to influence and enhance current and future employees' fairness perceptions. Our results suggest that justice expectations may serve as a critical point of leverage in these enhancement efforts, not only because of the expectation-perception link but also because expectations are formed prior to an event and, therefore, provide an opportunity for early intervention. Researchers in the field of alcohol prevention have developed an intervention known as expectancy challenge (e.g., Darkes & Goldman, 1993; Dunn, Lau, & Cruz, 2000) that might serve as a valuable model for programs aimed at managing applicants' justice expectations. This challenge approach modifies expectations by undermining or challenging false (negative) beliefs and increasing participants' attention to accurate (positive) information. Using the expectancy challenge approach as a model, organizations may be able to design pre-process orientation sessions that challenge applicants' negative expectations and stress the fairness of different elements of the selection process.

Organizations should also be aware that they can unintentionally influence individuals' perceptions of future events before the event takes place. Gilliland (1993), for example, notes that companies can gain reputations for how they treat applicants during the selection process,

and these reputations may shape applicants' expectations. Brockner et al. (2001) also point out that an organization may create low expectations of justice by poorly handling other visible and important organizational events. Since individuals will tend to "see what they expect to see," organizations must be cognizant of how their actions may influence the expectations of current and future employees. Hopefully future research will provide further insight into not only the consequences of justice expectations but also effective means of managing those consequences.

## Endnotes

<sup>1</sup> The four-factor models of justice expectations and justice perceptions also provided significantly better fit to the data than alternative one-, two-, or three-factor models. Statistics for these alternative models are available from the authors upon request.

<sup>2</sup> The relationships between the four dimensions of justice expectations and the three components of test-taking motivation (valence, instrumentality, and expectancy) were similar to those reported for the test-taking motivation composite. These results are available from the authors upon request.



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Author Note Page

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Table 1

Means, Standard Deviations, and Intercorrelations

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. African American Dummy Code (1)	0.23	0.42	--										
2. Hispanic Dummy Code (1)	0.06	0.24	-.14**	--									
3. Other Racial Group Dummy Code (1)	0.03	0.16	-.09**	-.04	--								
4. Gender (1)	1.17	0.37	.12**	.00	-.02	--							
5. Age (1)	2.65	0.76	.04	-.02	.03	.02	--						
6. Procedural Justice Expectations (1)	4.31	0.74	.00	.01	.01	.02	-.08**	(.81)					
7. Distributive Justice Expectations (1)	4.59	0.73	-.05*	.00	-.01	.00	-.02	.59**	(.87)				
8. Interpersonal Justice Expectations (1)	4.41	0.84	.01	-.02	-.01	.06**	-.02	.54**	.54**	(.94)			
9. Informational Justice Expectations (1)	4.62	0.70	-.02	.02	.02	.01	-.04	.66**	.63**	.66**	(.91)		
10. Test-taking Efficacy (1)	4.39	0.71	.00	.02	-.03	-.04	.04	.42**	.54**	.35**	.45**	(.89)	
11. Test-taking Motivation (1)	4.67	0.51	.02	.04	.01	-.03	-.02	.56**	.59**	.47**	.60**	.63**	(.89)
12. Intention to Accept Job (1)	4.86	0.60	-.03	.05	-.02	-.03	-.01	.51**	.62**	.52**	.64**	.44**	.65**
13. Intention to Recommend Job (1)	4.60	0.89	.02	.02	-.04	.04	-.02	.41**	.43**	.40**	.49**	.30**	.42**
14. Psychological Withdrawal (2)	1.86	1.11	-.02	-.03	.02	-.04	-.10**	-.08*	-.11**	-.13**	-.11**	-.10**	-.09*
15. Negative Affect (2)	1.99	1.16	-.08*	.02	.03	.06	-.07	-.08*	-.09*	-.11**	-.09*	-.10**	-.06
16. Procedural Justice Perceptions (2)	3.77	0.82	-.02	.04	-.04	.05	-.06	.22**	.15**	.14**	.14**	.09*	.11**
17. Distributive Justice Perceptions (2)	4.15	0.91	-.03	.01	-.03	.02	-.01	.12**	.22**	.10**	.06	.15**	.10**
18. Interpersonal Justice Perceptions (2)	4.60	0.75	.02	.02	-.03	.00	.05	.05	.10**	.08*	.08*	.06	.10**
19. Informational Justice Perceptions (2)	4.29	0.77	.04	.06	-.01	.03	-.02	.18**	.13**	.12**	.17**	.11**	.13**
20. Test Score (2)	222.65	37.91	-.26**	-.04	.01	.03	.15**	-.03	.10**	.00	.02	.09**	.03
21. Test Self-Assessment (2)	4.21	0.85	.07	.02	-.02	-.07	.04	.09**	.14**	.09**	.04	.24**	.11**

Note: (1) denotes that the variable was measured pre-test; (2) denotes the variable was measured post-test. Reliabilities are presented in the diagonal in parentheses.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 1 (cont.)

Means, Standard Deviations, and Intercorrelations

Variable	12	13	14	15	16	17	18	19	20	21
1. African American Dummy Code (1)										
2. Hispanic Dummy Code (1)										
3. Other Racial Group Dummy Code (1)										
4. Gender (1)										
5. Age (1)										
6. Procedural Justice Expectations (1)										
7. Distributive Justice Expectations (1)										
8. Interpersonal Justice Expectations (1)										
9. Informational Justice Expectations (1)										
10. Test-taking Efficacy (1)										
11. Test-taking Motivation (1)										
12. Intention to Accept Job (1)	--									
13. Intention to Recommend Job (1)	.53**	--								
14. Psychological Withdrawal (2)	-.13**	-.08*	(.81)							
15. Negative Affect (2)	-.08*	-.05	.60**	(.80)						
16. Procedural Justice Perceptions (2)	.04	.10**	-.11**	-.13**	(.79)					
17. Distributive Justice Perceptions (2)	.02	.03	-.21**	-.25**	.43**	(.93)				
18. Interpersonal Justice Perceptions (2)	.04	.15**	-.22**	-.20**	.42**	.42**	(.96)			
19. Informational Justice Perceptions (2)	.05	.10**	-.18**	-.17**	.56**	.42**	.58**	(.87)		
20. Test Score (2)	.05	-.01	-.16**	-.13**	.03	.19**	.06	-.02	--	
21. Test Self-Assessment (2)	-.01	.05	-.26**	-.37**	.34**	.51**	.40**	.36**	.21**	(.95)

Note: (1) denotes that the variable was measured pre-test; (2) denotes the variable was measured post-test. Reliabilities are presented in the diagonal in parentheses.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 2

Hierarchical Regression Results: Predicting Justice Expectations

Predictor/Step	B	SE B	95%		$\beta$	R <sup>2</sup>
			LB	UB		
DV: Procedural Justice Expectations						
1. African American Dummy Code	.00	.04	-.09	.08	.00	.01
Hispanic Dummy Code	.03	.08	-.12	.18	.01	
Other Racial Group Dummy Code	.02	.11	-.20	.24	.01	
Gender	.04	.05	-.05	.14	.02	
Age	-.06**	.02	-.11	-.02	-.07	
DV: Distributive Justice Expectations						
1. African American Dummy Code	-.10*	.04	-.18	-.02	-.06	.00
Hispanic Dummy Code	-.02	.07	-.16	.13	-.01	
Other Racial Group Dummy Code	-.08	.11	-.29	.14	-.02	
Gender	.00	.05	-.09	.09	.00	
Age	-.01	.02	-.05	.04	-.01	
DV: Interpersonal Justice Expectations						
1. African American Dummy Code	.00	.05	-.10	.09	.00	.00
Hispanic Dummy Code	-.06	.09	-.23	.10	-.02	
Other Racial Group Dummy Code	.00	.13	-.25	.25	.00	
Gender	.13*	.05	.03	.24	.06	
Age	-.01	.03	-.07	.04	-.01	
DV: Informational Justice Expectations						
1. African American Dummy Code	-.03	.04	-.10	.05	-.02	.00
Hispanic Dummy Code	.05	.07	-.09	.19	.02	
Other Racial Group Dummy Code	.07	.11	-.14	.28	.02	
Gender	.01	.04	-.08	.10	.00	
Age	-.03	.02	-.07	.01	-.03	

Note: DV = dependent variable. 95% CI = 95% confidence interval for unstandardized regression coefficients (B), lower and upper bounds.  $\beta$  = standardized regression coefficient. Significance levels are based on two-tailed t-tests.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 3

Hierarchical Regression Results: Predicting Pretest Test-taking Efficacy, Test-taking Motivation, and Job Acceptance and Recommendation Intentions

Predictor/Step	B	SE B	95% CI		$\beta$	$\Delta R^2$	$R^2$
			LB	UB			
DV: Test-taking Efficacy							
1. African American Dummy Code	.05	.03	-.01	.12	.03	.01	.01
Hispanic Dummy Code	.07	.06	-.05	.19	.02		
Other Racial Group Dummy Code	-.13	.09	-.30	.05	-.03		
Gender	-.07*	.04	-.15	.00	-.04		
Age	.06**	.02	.02	.09	.06		
2. Procedural Justice Expectations	.08**	.03	.03	.13	.08	.33**	.34**
Distributive Justice Expectations	.39**	.03	.34	.45	.40		
Interpersonal Justice Expectations	-.01	.02	-.05	.04	-.01		
Informational Justice Expectations	.17**	.03	.11	.23	.17		
DV: Test-taking motivation							
1. African American Dummy Code	.06**	.02	.02	.10	.05	.00	.00
Hispanic Dummy Code	.10*	.04	.02	.17	.04		
Other Racial Group Dummy Code	.03	.06	-.08	.14	.01		
Gender	-.06**	.02	-.11	-.02	-.05		
Age	.00	.01	-.02	.02	.00		
2. Procedural Justice Expectations	.13**	.02	.10	.17	.19	.48**	.48**
Distributive Justice Expectations	.22**	.02	.19	.25	.31		
Interpersonal Justice Expectations	.03*	.01	.00	.06	.05		
Informational Justice Expectations	.19**	.02	.15	.23	.26		
DV: Intention to Accept Job							
1. African American Dummy Code	.00	.03	-.05	.05	.00	.00	.00
Hispanic Dummy Code	.10*	.04	.01	.19	.04		
Other Racial Group Dummy Code	-.07	.07	-.20	.06	-.02		
Gender	-.05*	.03	-.11	.00	-.03		
Age	.01	.01	-.01	.04	.02		
2. Procedural Justice Expectations	.04	.02	.00	.07	.04	.49**	.49**
Distributive Justice Expectations	.27**	.02	.23	.31	.33		
Interpersonal Justice Expectations	.07**	.02	.04	.10	.10		
Informational Justice Expectations	.29**	.02	.25	.34	.34		

Note: DV = dependent variable. 95% CI = 95% confidence interval for unstandardized regression coefficients (B). Significance based on two-tailed t-tests. All coefficients are from the final step of the model with all variables entered.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 3 (cont.)

Hierarchical Regression Results: Predicting Pretest Test-taking Efficacy, Test-taking Motivation, and Job Acceptance and Recommendation Intentions

Predictor/Step	B	SE B	95% CI		$\beta$	$\Delta R^2$	$R^2$
			LB	UB			
DV: Intention to Recommend Job							
1. African American Dummy Code	.06	.04	-.02	.15	.03	.00	.00
Hispanic Dummy Code	.07	.08	-.08	.22	.02		
Other Racial Group Dummy Code	-.21	.12	-.44	.01	-.04		
Gender	.06	.05	-.03	.16	.03		
Age	.01	.02	-.04	.05	.01		
2. Procedural Justice Expectations	.10**	.03	.04	.17	.09	.27**	.27**
Distributive Justice Expectations	.19**	.03	.13	.26	.16		
Interpersonal Justice Expectations	.07*	.03	.02	.13	.07		
Informational Justice Expectations	.36**	.04	.28	.44	.28		

Note: DV = dependent variable. 95% CI = 95% confidence interval for unstandardized regression coefficients (B). Significance based on two-tailed t-tests. All coefficients are from the final step of the model with all variables entered.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 4

## Hierarchical Regression Results: Predicting Justice Perceptions

Predictor/Step	B	SE B	95% CI		$\beta$	$\Delta R^2$	$R^2$
			LB	UB			
DV: Procedural Justice Perceptions							
1. African American Dummy Code	-.08	.08	-.23	.07	-.04	.13**	.13**
Hispanic Dummy Code	.13	.12	-.11	.36	.04		
Other Racial Group Dummy Code	-.18	.19	-.55	.18	-.03		
Gender	.15*	.08	.00	.30	.07		
Age	-.05	.04	-.12	.02	-.05		
Test Self-Assessment	.32**	.03	.25	.38	.33		
2. Procedural Justice Expectations	.20**	.05	.11	.30	.19	.04**	.17**
Distributive Justice Expectations	-.02	.05	-.11	.08	-.01		
Interpersonal Justice Expectations	.02	.05	-.07	.11	.02		
Informational Justice Expectations	.01	.06	-.12	.13	.00		
DV: Distributive Justice Perceptions							
1. African American Dummy Code	-.13	.08	-.28	.02	-.05	.27**	.27**
Hispanic Dummy Code	.00	.12	-.24	.24	.00		
Other Racial Group Dummy Code	-.17	.19	-.54	.21	-.03		
Gender	.14	.08	-.01	.29	.06		
Age	-.03	.04	-.10	.05	-.02		
Test Self-Assessment	.53**	.03	.46	.59	.50		
2. Procedural Justice Expectations	.03	.05	-.07	.13	.02	.02**	.30** <sup>a</sup>
Distributive Justice Expectations	.23**	.05	.13	.33	.18		
Interpersonal Justice Expectations	-.02	.05	-.11	.07	-.02		
Informational Justice Expectations	-.08	.06	-.20	.05	-.06		

Note: DV = dependent variable. 95% CI = 95% confidence interval for unstandardized regression coefficients (B), lower and upper bounds.  $\beta$  = standardized regression coefficient. Significance levels are based on two-tailed t-tests. All coefficients are from the final step of the model with all variables entered.

<sup>a</sup>  $R^2$  totals do not add up due to rounding.

\*  $p < .05$ . \*\*  $p < .01$ .

Table 4 (cont.)

Hierarchical Regression Results: Predicting Justice Perceptions

Predictor/Step	B	SE B	95% CI		$\beta$	$\Delta R^2$	$R^2$
			LB	UB			
DV: Interpersonal Justice Perceptions							
1. African American Dummy Code	-.01	.07	-.15	.12	-.01	.16**	.16**
Hispanic Dummy Code	.03	.11	-.19	.24	.01		
Other Racial Group Dummy Code	-.12	.17	-.46	.21	-.02		
Gender	.07	.07	-.07	.20	.03		
Age	.04	.03	-.03	.10	.04		
Test Self-Assessment	.35**	.03	.29	.41	.40		
2. Procedural Justice Expectations	-.06	.05	-.15	.03	-.06	.01	.17**
Distributive Justice Expectations	.02	.05	-.08	.11	.01		
Interpersonal Justice Expectations	-.01	.04	-.09	.08	-.01		
Informational Justice Expectations	.12*	.06	.01	.24	.11		
DV: Informational Justice Perceptions							
1. African American Dummy Code	.05	.07	-.09	.19	.03	.14**	.14**
Hispanic Dummy Code	.20	.11	-.02	.42	.06		
Other Racial Group Dummy Code	-.02	.17	-.36	.32	.00		
Gender	.11	.07	-.03	.25	.05		
Age	-.02	.03	-.09	.04	-.02		
Test Self-Assessment	.32**	.03	.26	.38	.36		
2. Procedural Justice Expectations	.10*	.05	.01	.19	.10	.03**	.17**
Distributive Justice Expectations	-.03	.05	-.12	.07	-.02		
Interpersonal Justice Expectations	-.03	.04	-.11	.05	-.03		
Informational Justice Expectations	.15*	.06	.03	.26	.13		

Note: DV = dependent variable. 95% CI = 95% confidence interval for unstandardized regression coefficients (B), lower and upper bounds.  $\beta$  = standardized regression coefficient. Significance levels are based on two-tailed t-tests. All coefficients are from the final step of the model with all variables entered.  
\*  $p < .05$ . \*\*  $p < .01$ .



Table 5

Hierarchical Regression Results: Predicting Negative Affect and Psychological Withdraw

Predictor/Step	B	SE B	95% CI		$\beta$	$\Delta R^2$	$R^2$
			LB	UB			
DV: Negative Affect							
1. African American Dummy Code	-.22*	.11	-.44	.00	-.07	.02*	.02*
Hispanic Dummy Code	.10	.18	-.25	.44	.02		
Other Racial Group Dummy Code	.20	.28	-.34	.74	.03		
Gender	.19	.11	-.03	.41	.06		
Age	-.10	.05	-.21	.00	-.07		
2. Procedural Justice Expectations	-.01	.08	-.16	.14	-.01	.01*	.03**
Distributive Justice Expectations	.02	.08	-.14	.18	.01		
Interpersonal Justice Expectations	-.09	.07	-.22	.05	-.06		
Informational Justice Expectations	-.06	.10	-.26	.13	-.04		
3. Procedural Justice Perceptions	.02	.06	-.10	.14	.02	.07**	.10**
Distributive Justice Perceptions	-.27**	.05	-.37	-.17	-.21		
Interpersonal Justice Perceptions	-.17**	.07	-.31	-.03	-.11		
Informational Justice Perceptions	-.04	.07	-.18	.11	-.02		
4. Procedural Expectations x Perceptions	-.04	.06	-.16	.09	-.03	.01	.11**
Distributive Expectations x Perceptions	-.01	.06	-.12	.11	.00		
Interpersonal Expectations x Perceptions	-.17*	.07	-.30	-.03	-.10		
Informational Expectations x Perceptions	.06	.07	-.08	.21	.04		
DV: Psychological Withdrawal							
1. African American Dummy Code	-.06	.11	-.27	.15	-.02	.01	.01
Hispanic Dummy Code	-.12	.17	-.45	.21	-.02		
Other Racial Group Dummy Code	.16	.26	-.35	.68	.02		
Gender	-.12	.11	-.33	.09	-.04		
Age	-.14**	.05	-.24	-.04	-.10		
2. Procedural Justice Expectations	-.02	.07	-.16	.13	-.01	.02**	.04** <sup>a</sup>
Distributive Justice Expectations	-.01	.08	-.17	.14	-.01		
Interpersonal Justice Expectations	-.07	.06	-.20	.05	-.05		
Informational Justice Expectations	-.11	.09	-.30	.07	-.07		
3. Procedural Justice Perceptions	.07	.06	-.05	.19	.05	.06**	.09** <sup>a</sup>
Distributive Justice Perceptions	-.17**	.05	-.27	-.07	-.14		
Interpersonal Justice Perceptions	-.22**	.07	-.35	-.09	-.15		
Informational Justice Perceptions	-.08	.07	-.21	.06	-.05		
4. Procedural Expectations x Perceptions	-.06	.06	-.17	.06	-.04	.01	.10**
Distributive Expectations x Perceptions	.05	.06	-.06	-.16	.04		
Interpersonal Expectations x Perceptions	-.13*	.07	-.26	-.01	-.08		
Informational Expectations x Perceptions	-.04	.07	-.20	.08	-.02		

Note: DV = dependent variable. 95% CI = 95% confidence interval for unstandardized regression coefficients (B). Significance based on two-tailed t-tests. All coefficients are from the final step of the model with all variables entered. All continuous variables were centered before creating interaction terms.

\*  $p < .05$ . \*\*  $p < .01$ .

Figure 1

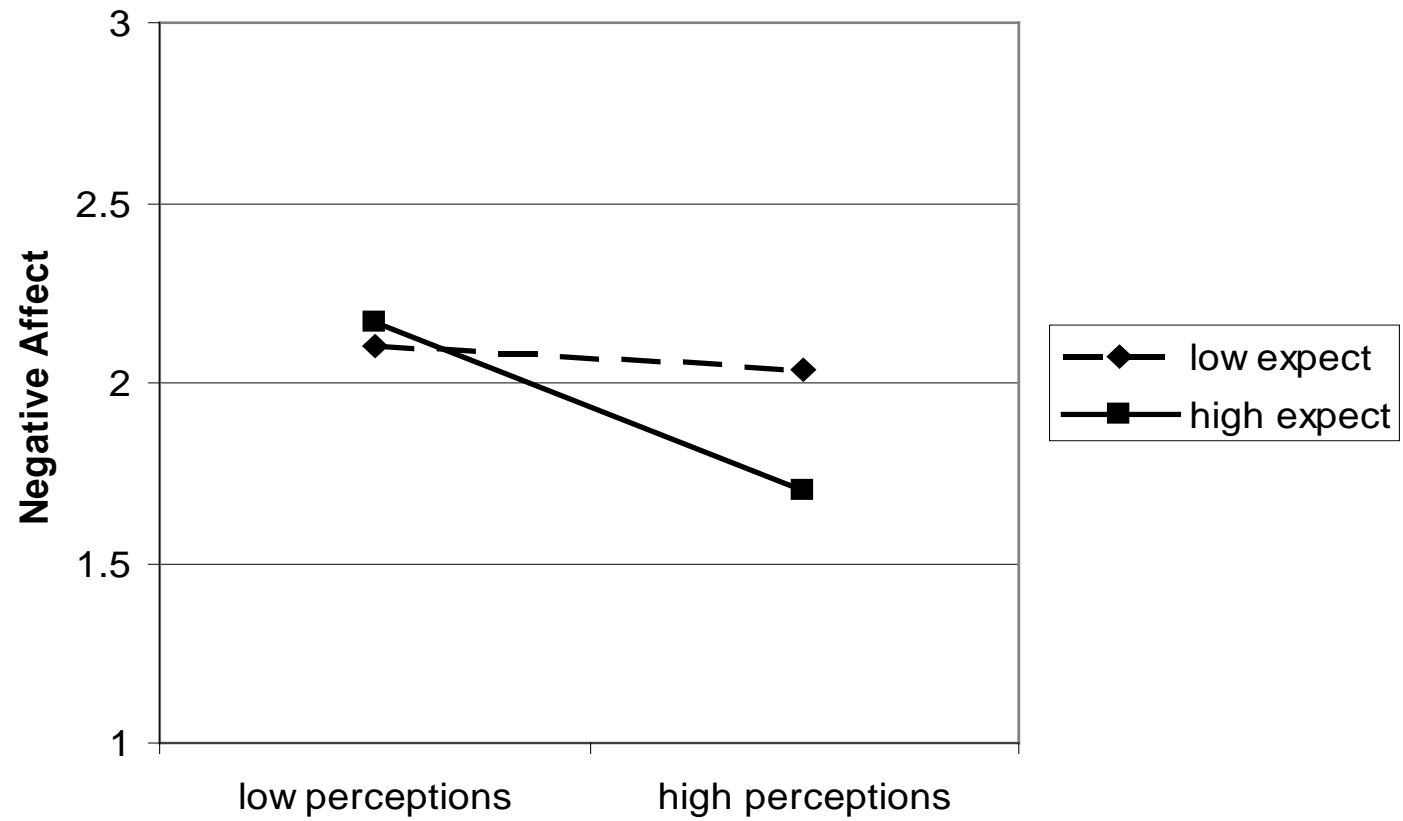
Interactive Effect of Interpersonal Justice Expectations and Perceptions on Applicants' Negative Affect

Figure 2

Interactive Effect of Interpersonal Justice Expectations and Perceptions on Applicants' Psychological Withdrawal

