The Effects of Anticipation and Recognition Source in Employee Recognition Programs

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March 2016

We thank the participants in the Accountancy Behavioral Seminar and workshop participants at University of Illinois at Urbana-Champaign for very helpful feedback. We also gratefully acknowledge financial support from the Department of Accountancy in the College of Business at University of Illinois at Urbana-Champaign and the College of Business at DePaul University.
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ABSTRACT

Firms are increasing their use of non-monetary recognition, the recognition of high performing employees via pure acknowledgment (e.g., employee of the month). Despite its prevalent use, the behavioral impact of non-monetary recognition has received minimal research attention. We investigate the impact of two dimensions of non-monetary recognition programs on employees’ effort and alignment with the firm and its managers. Specifically, we examine the effects of (1) the extent to which employees anticipate (i.e., are aware of) the potential for recognition and (2) the source of the recognition. We predict and find that employees’ propensity to exert reciprocal effort following unanticipated recognition is greater when the employee is recognized by their immediate manager than when they are recognized by the (more general) firm. Notably, our theory highlights a possible unintended consequence of recognition – the potential for employees to reciprocate to their managers, even when reciprocated effort is to the detriment of the firm.

Keywords: non-financial recognition; employee effort; reciprocity; anticipated rewards; employee alignment; non-monetary recognition; employee acknowledgment; pure recognition
I. INTRODUCTION

Employee recognition is often cited as an important tool used by managers to motivate employees (Alexander 2013; Cannon 2015; Llopis 2012; Pozin 2011; The Muse 2013) and the use of employee recognition is currently rising (Globoforce 2013; SHRM 2013; WorldatWork 2013). Within employee recognition programs, non-monetary recognition, or acknowledgement of an employee’s performance that does not involve an immediate financial or non-financial transfer of wealth to the employee, is often cited as a key motivational tool that is increasing in popularity (Globoforce 2013; Nelson 2005; SHRM 2013; WorldatWork 2013). The purpose of this paper is to investigate the impact of two dimensions of non-monetary recognition programs on employees’ effort and alignment with the firm and its managers. Specifically, we examine the effects of (1) the extent to which employees anticipate (i.e., are aware of) the potential for recognition and (2) the source of the recognition.

Many setting-characteristics influence the state of these two dimensions. Of particular importance, due to its influence on both dimensions, is the extent to which firms are informed about the desired course of action for an employee to take. For instance, when firms are well-informed about the desired course of action for an employee, recognition programs can be highly-structured, and employees can be made aware that the firm will recognize superior performance in the future, making recognition anticipated. Conversely, when firms are less-informed (i.e. in more ambiguous settings) such that the optimal course of action for employees is not known, firms may want more flexibility in the nature and extent of recognition programs. In such cases, firm managers may not commit to formal recognition programs, instead deciding to recognize employees’ performance in a reactive manner, making recognition unanticipated. The extent to which firms are informed about the desired course of action for an employee to
take influences another recognition program design choice: the source of the recognition. In more structured settings, recognition may come from the firm in general. Conversely, firms that need or want more flexibility often endow the direct managers of employees with discretion over recognition decisions. Given the inter-related nature of these two recognition program design choices, we investigate their individual and joint multi-period effects, ultimately providing a better understanding of the benefits and costs of employee recognition programs.

We rely on extant economics and psychology theory to develop our predictions. We hypothesize that employees value non-monetary recognition and, that in anticipation of the potential for such recognition, employees will exert higher effort toward tasks for which performance is recognized. With respect to post-recognition effort, we rely on prior theory related to individuals’ propensity to reciprocate to others’ actions (Falk & Fischbacher 2006; Fehr & Falk 2002; Rabin 1993). Specifically, when an employee receives an anticipated recognition, they consider such recognition by the principal to be part of an \textit{ex ante} incentive arrangement. In this scenario, the recognition is the culmination of that arrangement, whereby the arrangement is concluded. In contrast, in the event of an \textit{unanticipated} recognition, the recognition is more likely construed as an act of kindness on the part of the principal (i.e., containing more of an element of surprise). In response, the employee may reciprocate this act by exerting greater effort on tasks that are important to the principal (relative to an employee who anticipated the recognition). Put another way, the unanticipated recognition initiates an implied agreement, and the recognized employee will take actions to honor the agreement via post-recognition effort.

Notably, however, employees’ propensity to reciprocate with costly effort is moderated by the source of the recognition. Specifically, in the event of unanticipated recognition, the
perceived social distance between the employee and an immediate manager allows the employee to more easily identify with the manager, forming a stronger group identity and increasing the employee’s desire to reciprocate (Charness & Gneezy 2008; Charness, Haruvy & Sonsino 2007; Hoffman, McCabe & Smith 1996; Wilkinson-Ryan 2012). Similarly, the actions that benefit an immediate manager are more likely to be salient, more easy to identify, and ultimately more likely to provide the employee with satisfaction that reciprocity has been achieved (i.e., relative to when the broader firm or higher-level manager provides the recognition). Thus, we predict that the difference in employees’ costly effort in response to unanticipated (versus anticipated) recognition is greater when the recognition source is the employee’s immediate manager than when the source is a higher-level firm representative (e.g., executive, owner, etc.).¹

We test our theory using a controlled laboratory experiment, in which participants act as managers or employees within a hypothetical firm. Employees perform a real-effort task over multiple periods. We manipulate employees’ anticipation of a potential non-monetary recognition for superior performance at two levels: no anticipation versus anticipation. We manipulate the recognition source by modifying the social proximity of manager-participants and employee-participants within the hypothetical firm’s hierarchy at two levels: immediate manager versus a higher-level management team. Measured variables include personality traits, demographic characteristics, and whether an employee is recognized for superior performance. Our key dependent variables are the employees’ overall pre-recognition performance, and their post-recognition performance on three individual tasks, each benefiting constituents (i.e., themselves, their manager, and the high-level management team) to varying degrees.

¹ Further, although we lack sufficient related theory, we develop and address empirical research questions related to
Surprisingly, we do not find support for an effect of anticipation on pre-recognition effort. However, we do find support for our prediction that recognition source moderates the effect of non-monetary recognition anticipation on reciprocal effort. That is, participants who did not anticipate the potential for recognition, but who were recognized by their direct manager, exerted more reciprocal effort than employees who anticipated such recognition. However, no such difference exists between employees who anticipated and who did not anticipate recognition when they were recognized by the higher-level management team. Collectively, these results suggest that even though anticipation does not lead employees to exert current-period effort, anticipation has major implications for how employees respond to being recognized.

Our study contributes to practitioners’ understanding of the effects of non-monetary recognition on employees’ effort. Specifically, we enhance the understanding of how the knowledge of potential recognition and the source of such recognition on employees’ effort and alignment. Notably, our results highlight the potential for an unintended consequence of a commonly confounded choice made by firms – one in which firms do not commit to recognizing employees, but rather endow managers with discretion over recognition decisions. That is, regardless of the intentions of the manager, employees may reciprocate to unanticipated recognition by aligning with the manager, even when doing so is potentially to the detriment of the firm. Understanding the potential for such effects allows firms to make more informed choices regarding the design of employee recognition programs, thereby harnessing the intended benefits of such programs, while minimizing related costs.

In addition, our study contributes to prior academic research related to non-monetary rewards, as it takes a deeper dive into the nature of the effects of non-monetary employee
recognition. Specifically, while previous studies have found that, relative to monetary rewards, non-monetary rewards increase employees’ likelihood to reciprocate with higher effort (e.g., Kube, Maréchal, & Puppe 2012) and the scarcity of non-monetary recognition induces changes in employees’ post-recognition effort (Bradler, Dur, Neckermann, & Non 2014), we develop theory suggesting that employees’ anticipation of recognition may serve as a boundary condition for such effects.

The remainder of this paper is organized as follows: Section II describes our theory and hypotheses, Section III describes our method, Section IV presents our results, and Section V concludes.

II. THEORY AND HYPOTHESIS DEVELOPMENT

Background

Managers can utilize a variety of incentives to motivate employees, including non-monetary recognition. We define non-monetary recognition as acknowledgement of an employee’s performance that does not involve an immediate financial or non-financial transfer of wealth to the employee. This distinguishes it from recognition that is implicitly or explicitly bestowed upon an employee when they are given cash or another tangible asset (Condly, Clark, & Stolovitch 2003; Long & Shields 2010; Presslee, Vance, & Webb 2013). Examples of non-monetary recognition include formal commendations and awards, public or private praise, favorable mention in company publications, and status indicators such as employee of the month (Aguinis, Joo, & Gottfredson 2013).

Non-monetary recognition is prevalent in organizational contexts. For instance, many practical guides to motivating employees emphasize employee recognition (Alexander 2013;
Cannon 2015; Llopis 2012; Pozin 2011; The Muse 2013). In addition, survey evidence suggests that in recent years, more businesses are using recognition programs, in part because managers believe they increase employee effort (Globoforce 2013; SHRM 2013; WorldatWork 2013).

Despite the prevalence and uniqueness of non-monetary incentives, academic research has primarily focused on the benefits and costs of financial incentives (Bonner & Sprinkle 2000; Bonner & Sprinkle 2002; Condly et al. 2003). Only more recently have researchers investigated non-financial incentives (Aguinis et al. 2013; Bradler et al. 2014; Kube et al. 2012; Long & Shields 2010; Presslee et al. 2013). Specifically, previous studies have found that relative to monetary rewards, non-monetary rewards increase employees’ likelihood to reciprocate with higher effort (e.g., Kube et al. 2012) and the scarcity of non-monetary recognition induces changes in employees’ post-recognition effort (Bradler et al. 2014).

Due to the substantial variability within and across firms’ employee recognition programs there remains a potential to investigate the effects of other program features. Building on this potential and adding to the recent developments within the broader non-monetary incentives literature, we investigate two important features within employee recognition programs: employees’ anticipation of the potential for recognition and the source of the recognition. Recognition may be part of an anticipated (unanticipated) program in which employees are aware (are not aware) of the potential for recognition. For instance, firms may have an employee of the month designation for high performers allowing employees to anticipate the potential for this designation in a future month. Alternatively, an employee may be spontaneously recognized by their manager for their performance on a project, precluding anticipation of the potential for recognition. Further, we consider a hierarchical principal-agent setting in which high-performing employees can be recognized by multiple principals. In this setting, employees may receive
recognition from their immediate supervisor or from a source higher in the firm (e.g., from an executive team, the firm as a whole, etc.).

Many setting-characteristics influence the state of these two dimensions. For instance, when firms are well-informed about desired courses of action, recognition programs can be highly-structured, and employees can be made aware that the firm will recognize superior performance in the future. Conversely, firms in more ambiguous settings, in which optimal courses of actions for employees are lesser known, may want more flexibility in the nature and extent of recognition programs. In such cases, the firm may not commit to formal recognition programs, instead deciding to recognize employees’ performance in a reactive manner. We investigate the implications of employees’ anticipation of the recognition potential for both current and future period performance.

The source of the recognition is also a key structural design choice for employee recognition programs. Again, firms in ambiguous settings may need or want more flexibility and endow employees’ direct managers with discretion over recognition decisions. Employees’ perceptions of and reaction to recognition that comes from a direct manager likely differs from that related to recognition coming from higher up in the firm (Charness & Gneezy 2008; Charness, Haruvy & Sonsino 2007; Hoffman, McCabe & Smith 1996; Wilkinson-Ryan 2012). Given the inter-related nature of these two recognition program design choices, we investigate the individual and joint multi-period effects of our two factors of interest, ultimately pursuing a better understanding of the benefits and costs of employee recognition programs.

**Hypothesis Development**

The anticipation of the potential recognition and the common knowledge that higher performance is necessary to achieve this recognition are critical features of incentive programs
aimed at increasing employees’ pre-recognition effort. If the employee is unaware of the potential recognition available from higher effort, the employee has no incentive to increase effort. While employees’ propensity to respond to potential recognition may be influenced by other setting characteristics (e.g., the presence of accompanying financial incentives, etc.), \textit{ceteris paribus}, knowledge of potential recognition will increase employees’ effort as such recognition validates employees’ intrinsic motivation to perform well (Cameron & Pierce 1994). This leads to the following hypothesis:

H1: Employees who anticipate a potential recognition will exert higher effort than employees who do not anticipate a potential recognition.

Our next hypothesis concerns the behavior of employees \textit{after} having received recognition for past performance. From a neoclassical economics perspective, in the absence of additional incentives, self-interested, wealth-maximizing employees will not change their effort levels after receiving recognition. However, prior research indicates that individuals do not act solely based on monetary payoffs (or lack thereof), and often reveal social preferences in their behavior (Berg, Dickhaut & McCabe 1995; Chen & Li 2009; Condly et al. 2003). In our setting, we are specifically interested in individuals’ willingness to reciprocate, which has been shown to depend on both the perceived intentions of others, as well as economic outcomes. In fact, the same economic outcome may result in different propensities to reciprocate depending on the history of interactions between players. Prior actions can indicate the intentions of other parties, which influence whether an individual perceives others’ actions as being kind or unkind. Both perceived kindness and economic outcomes influence an individual’s willingness to reciprocate, with inferences about kindness being influenced by others’ choices to increase the payoffs of the individual (Falk & Fischbacher 2006).
In our context, we expect the history of an employee’s interaction with the recognizing party to influence what inferences the employee makes about the recognizing party’s degree of kindness. In particular, if recognition is perceived by an employee to be strategic, the employee will be less likely to infer that the recognizing party is kind (Stanca, Bruni, & Corazzini 2008). If, *ex ante*, the recognizing party arranges an explicit agreement with employees that provides the highest performer with recognition, employees may infer that the recognizing party’s actions are strategic – the party is trying to increase the employees’ effort levels. Additionally, based on the explicit agreement, the recognition serves as the final concluding action of the agreement.

In contrast, when recognition is unanticipated, employees are less likely to view the recognizing party’s actions as being strategic. Instead, employees may view unanticipated recognition as discretionary. Prior research shows that an action appears more kind when an individual has the ability to make a choice that was less favorable for others but chooses not to do so (Falk & Fischbacher 2006). Finally, the unanticipated recognition may be perceived as the initiating action of an implied agreement wherein the employees may feel the need to reciprocate in order to finalize the agreement.

Ultimately, this suggests that employees will increase costly effort more in response to unanticipated recognition than anticipated recognition. However, we argue that this effect is moderated by the source of the recognition (i.e., the employee’s direct manager or the broader firm). Prior research suggests that social distance and group identity influence individuals’ propensity to reciprocate. Specifically, lower social distance (e.g., Charness & Gneezy 2008; Charness et al. 2007; Hoffman et al. 1996; Wilkinson-Ryan 2012) and a shared group identity (Chen & Li 2009) both lead to increased reciprocity between individuals. These tendencies may
be due to people's unconscious belief that social distance correlates with the extent of future interaction (Hoffman et al. 1996; Wilkinson-Ryan 2012).

Additionally, as the unanticipated recognition may be perceived as the initiating action which creates an implied agreement between employee and the recognizer, in order to finalize the implied agreement the employee may feel the reciprocity must be observed by the counterparty. As the actions that benefit an immediate manager are likely more salient and more easily observed by the employee, reciprocity towards the immediate manager may provide the employee with satisfaction that reciprocity has been achieved (i.e., relative to when the broader firm or higher-level manager provides the recognition).

Collectively, this discussion suggests that recognition source moderates the effect of recognition anticipation on employees’ reciprocal effort, as elaborated on in the following hypothesis:

H2: The difference between anticipating and non-anticipating recognized employees’ reciprocal effort is greater when the recognition comes from the employees’ manager than when the recognition comes from the firm.

Notably, the above hypothesis is not without tension. For instance, individuals may perceive recognition from the firm (or higher management) as more valuable than recognition from their immediate manager. Thus, the need for (and potential benefits) accruing from reciprocal effort may be greater when the employee is recognized by the firm than when recognized by the manager. However, based on the theory outlined above, we believe the increased desire to reciprocate due to the combination of perceived group identity and the employees’ ability to more easily identify when reciprocity has been achieved warrants our directional hypothesis, but highlights the empirical nature of our overall research question.
**Research Question**

The structure and source of the incentive program may also influence post-recognition behavior for employees who are *not* recognized. Unanticipated recognition may broaden employees’ perspective regarding the types of performance that are potentially recognized in the future, signaling an increased probability of additional future possibilities. Therefore, non-recognized employees may naturally perceive an increase in the probability of receiving a future recognition reward. As such, the increase in the probability of additional recognition may result in employees increasing effort in order to receive the next potential “surprise” reward.

However, while the discussion of reciprocity above focused on the perceived kindness of actions, reciprocity theory also suggests individuals reciprocate negative actions. That is, individuals respond to negative actions with negative actions, and this response is often greater than would be predicted by self-interested models (Fehr, & Gächter 2000; Rabin 1993; Stouten, De Cremer, & van Dijk 2006). Consistent with this theory, employees who are not recognized may believe they had the necessary ability to perform (and be recognized) had they been informed of the potential reward, which may lead employees to perceive the lack of disclosure as a negative action. Negative reciprocity would entail actively foregoing effort that benefits others, and maintaining (or increasing) one’s own self-interested behavior.

Similarly, the source of recognition may influence non-recognized employees’ behavior. Related to the first point above, perceptions of the probability of future potential recognition opportunities are potentially affected by the source of the recognition. For instance, recognition by the firm may make salient the variability in the types of performance for which recognition is possible, and thus perceive a higher probability of receiving a future recognition. Further, a
manager foregoing to recognize an employee may be construed as more negative than when the broader firm foregoes recognition.

Ultimately, we lack sufficient theory related to these competing forces to make directional predictions. Thus, we establish the following empirical research question:

RQ: What are the joint effects of anticipation and recognition source on non-recognized employee’s post-recognition effort?

III. METHOD

Participants

Given the abstract nature of the task (described below) and the absence of any requirement for participants to have institutional knowledge or skills, we use undergraduate students as participants in our study (Libby, Bloomfield & Nelson 2002). One-hundred and eighty participants participated in our study of which 55 percent of the participants are female.

Experimental Task

Participants were randomly assigned to the experimental conditions (discussed below), as well as the role of manager or employee. One manager and four employees comprised a division; four divisions comprised a firm. Further, the four managers within the firm comprised an executive committee. Participants were anonymous, but were informed that all 16 employees and four managers were spread throughout the computer lab. Each participant chose a unique identification label. Figure 1 provides details of the firm structure.

[Insert Figure 1 here]

We employ a two-period computerized setting in which employees performed a real-effort task. Both periods entailed the same basic task. Specifically, participants were provided an excerpt of a hypothetical customer list. For each customer, there were three records: a region
code, a loyalty card number, and a local shopper’s code. Participants used the listing to find an identified customer within the listing, and then input the correct record(s) for that customer in a textbox (i.e., the firm’s database). Each record was six digits. Employees could complete between one and three records for each customer, and then click the “submit” button. If a participant made an error for any record, the computer program alerted the participant, and required him/her to re-input the record. If all input records were correct, the screen advanced to the next listing excerpt and identified customer. For purposes of communication, we refer to the three record types (i.e., region code, etc.) as Task A, Task B, and Task C. (Appendix A contains a sample screen of the main experimental task.)

Procedure

After participants arrive in the lab, we provide them with extensive instructions on laboratory computers. The experimental instrument is administered using z-Tree software (Fischbacher 2007). First, we inform participants about the firm hierarchy. We then inform participants about the task, and provide them an opportunity to practice the task. Participants then create a unique nickname.

Next, we inform participants that the two employees with the most records completed in each division will be recognized as the highest performers. Recognition is in the form of a virtual message sent to all employees within the division, highlighting the employee’s superior performance. Participants then began period 1. After the task stage of period 1 concluded, managers of each division identified the two top-performing employees within their division. Participants then received instructions about period 2.

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2 Recognition of employees identified participants using their chosen nicknames.
3 Managers could identify whichever employees they wished as top-performing. However, they only received information about the total number of records completed during period 1. In all instances, the manager identified the two top performing employees based on total records completed.
In period 2, participants engaged in the same task as in period 1. However, before period 2 began, employees were informed that they will receive payment (in the experimental currency lira) based on their period 2 performance. Each record-type yielded different piece-rate payments for the employee, their manager, and the executive committee. Task A favored the employee, Task B favored the manager, and Task C favored the executive committee. Participants were provided the specific payout table via an on-screen instruction, as well as in hard-copy format, and could refer to this table throughout period 2. Figure 2 presents the payout table used in all sessions.

[Insert Figure 2 here]

After participants completed period 2, they completed a post-experimental questionnaire. Participants were then paid their earnings from period 2, converted from lira to dollars. Participants were compensated $8.50 on average. Compensation did not differ between conditions (all p > 0.15). Figure 3 presents the timeline for the experimental session.

[Insert Figure 3 here]

**Conditions and Variables**

We use a fully crossed, between-subjects 2x2 experimental design. We manipulate employee *anticipation* of the potential for performance recognition at two levels: anticipated versus unanticipated. We manipulate *anticipation* by informing participants of the potential for a recognition reward based on their period 1 performance. Notably, all conditions involve the recognition of two of four employees per team, based on their period 1 performance.

We also manipulate *recognition source* at two levels: direct manager versus executive committee. We manipulate *recognition source* by framing the recognition as being provided from the employee’s direct manager or an executive committee. In all conditions, the team’s
manager identifies the two highest performing employees, but the communication of the recognition itself – operationalized as an email to all employees – comes from either the manager or the executive committee. (See Appendix B for our manipulations.)

In order to test our hypotheses we proxy the magnitude of employee effort as the total records completed (i.e., higher effort translates into more records completed) and proxy effort direction by measuring the number of completed records in each category (i.e., Task A, B, and C). Given the task-specific payouts described earlier, as well as the fact that period 2 is the last round of task performance, the conventional self-interested economic prediction is that employees should direct all effort towards the completion of Task A. This reflects the fact that effort directed away from Task A provides lower payment (is costly), and employees cannot be rewarded ex post for directing effort away from Task A (either explicitly via additional discretionary compensation or implicitly via increased reputation with the firm or manager). As such, effort allocated towards completing Task B or Task C reflects reciprocal effort.4

IV. RESULTS

Hypotheses Tests

H1 predicts that employees increase effort when they anticipate the potential for non-monetary recognition. We test our theory using total performance from period 1 (i.e., the number of records completed, regardless of type A, B, or C). We utilize an ANOVA to test the main effect of anticipation on period 1 performance. Panel A of Table 1 presents the relevant descriptive statistics and Panel B presents the results of the ANOVA. Based on this test, it does

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4 The experimental design precludes any reputation effect, and beyond the set piece-rate received per record completed, employees cannot be rewarded or punished based on their effort allocation in period 2.
not appear that anticipating a non-monetary recognition has a positive effect on performance, as the total performance of anticipated condition participants (mean = 34.76) is not significantly greater than the total performance of unanticipated condition participants (mean = 36.00) (F = 0.24; p = 0.31). Thus, it does not appear that anticipation of non-monetary recognition affects current-period performance.

[Insert Table 1 here]

H2 predicts that recognition source moderates the effect of recognition anticipation on employees’ effort, subsequent to the recognition. To test this hypothesis, we limit our analysis to those participants who received recognition for their period 1 performance (i.e., two individuals from each four-person group). We focus on the number of records completed that represent reciprocal effort exerted on behalf of the source of the recognition. Thus, for participants in the manager (executive committee) condition, we use period 2 performance on task B (task C). Figure 4 graphically presents the results for each condition and Panel A of Table 2 presents relevant descriptive statistics.

[Insert Figure 4 here]

To test the ordinal interaction reflected in H2, we use contrast coding (Buckless and Ravenscroft 1990). We use the following contrast weights: -1 for anticipated/manager, +3 for unanticipated/manager, -1 for anticipated/executive-committee, and -1 for unanticipated/executive-committee. As reported in Panel B of Table 2, the planned contrast is statistically significant (F = 13.72; p < 0.01)\(^5\). As reported in Panel C of Table 2, simple effects

\(^5\) Our results are robust to alternative contrast weights. Alternative weights of (+1,+3,-2,-2), (+1,+2,-2,-1), and (+1,+2,-1,-2), for (anticipated/manager, unanticipated/manager, unanticipated/executive-committee, unanticipated/executive-committee), respectively, all yield a significant results (p < 0.01). We assess the superiority of our main contrast (-1,+3,-1,-1) over the other by means of the semi-omnibus F-test, which tests whether the cells assigned the (-1) weights are significantly different from each other. The semi-omnibus F-test indicates that these cells are not significantly different from each other (F = 2.03, p = .14), further supporting the main contrast specification.
tests indicate that when recognition is received from the executive committee, there is no difference in reciprocal task performance between the anticipated and unanticipated conditions (p = 0.39). In contrast, when recognition is received from the manager, reciprocal task performance is higher when the recognition is unanticipated than when it is anticipated (p = 0.03). This analysis supports H2.

Collectively, our results suggest that despite a lack of an effect on current performance, whether a recognition is anticipated or unanticipated has implications for recognized employees’ future performance. Notably, however, this effect is moderated by the source of that recognition. That is, when the recognition is provided by a manager, employees reciprocate with effort that benefits the manager only, whereas there is less propensity to do so when the recognition is provided by the firm (or broader set of management).

**Additional Analyses**

Beyond effects on recognized employees, we also explore the effects of non-monetary recognition anticipation and source on non-recognized employees. As discussed earlier, these participants did not receive recognition for their period 1 performance, but did receive information about others’ recognition.

In line with our research question, we conduct a similar analysis to that performed as our main test of H2 for non-recognized employees. Panel A of Table 3 presents relevant descriptive statistics. Given we do not have expectations regarding the specific pattern, we run a general ANOVA, with reciprocal task performance as the dependent variable, and recognition
anticipation and source as the independent variables. As presented in Panel B of Table 3, the interaction is not significant (F = 0.07; p = 0.79).

[Insert Table 3 here]

As an exploratory analysis, we consider the effects of not being recognized on overall task performance. Panel A of Table 4 presents relevant descriptive statistics for total task performance in period 2 (i.e., Task A, B, and C combined). We run an ANOVA, with total task performance in period 2 as the dependent variable, and recognition anticipation and source as the independent variables. As presented in Panel B of Table 4, the interaction is marginally significant (F = 3.69; p = 0.06, two-tailed). Exploration of the simple effects indicate that when recognition is anticipated there is no difference in total performance between recognition source conditions (p=0.98). In contrast, when recognition is unanticipated, total performance is significantly higher when the recognition is received from the manager than when recognition is received from the executive committee (p < 0.01).

This analysis suggests an interacting performance effect on unrecognized employees. When the potential for recognition is anticipated but not received, the source of the recognition does not influence overall employee performance. However, when recognition is unanticipated, employees who failed to receive recognition from the executive committee decreased performance (below that of anticipated recognition) and employees who failed to receive recognition from their manager increased performance (above that of anticipated recognition). Figure 5 graphically presents the results for each condition and Panel A of Table 4 presents relevant descriptive statistics.

[Insert Figure 5 here]
V. CONCLUSION

This study investigates how two aspects of non-monetary recognition affect employees’ willingness to reciprocate to the party recognizing their performance: (1) the extent to which employees anticipate (i.e., are aware of) the potential recognition and (2) the source of the recognition. We predict and find that employees reciprocate more strongly when recognition is unanticipated, but this effect is moderated by the source of the recognition. Specifically, employees reciprocate more strongly to direct managers than to the firm as a whole because managers are closer in social distance to employees, managers are likely seen as sharing an identity or group membership with employees, and reciprocity towards managers more easily provides employees with the ability to identify when reciprocity has been achieved.

Our study is important to practitioners as non-monetary recognition is likely ubiquitous in a corporate environment – many managers likely offer both informal and formal recognition to employees on a regular basis. In fact, practical guides to motivating employees emphasize the importance of non-monetary recognition and recent survey evidence suggests firms are using non-monetary recognition more frequently (Alexander 2013; Cannon 2015; Globoforce 2013; Llopis 2012; Pozin 2011; SHRM 2013; The Muse 2013; WorldatWork 2013). Despite its perceived importance and frequent use, managers and firms may be unaware that employees direct their reciprocation towards the source of non-monetary recognition, which may be dysfunctional when managers and firms do not have perfectly aligned interests. Interestingly, this dysfunctional outcome does not require that managers purposely attempt to collude with employees to extract rents at the firm’s expense as the classic owner-manager-employee model of collusion through reciprocation suggests (Tirole 1986). Short of collusion, simply framing
non-monetary recognition as being from managers (as opposed to the firm) can lead employees to reciprocate in ways that managers and the firm may not anticipate.

Our study suggests several avenues for future research. First, it may be interesting to investigate how employees make attributions about their manager’s influence and responsibility for determining who receives non-monetary recognition when the recognition is framed as coming from the firm. This could be investigated by explicitly telling employees what process is in place to determine what employees receive recognition, or by investigating employees’ mental models of the process of how recognition is determined. Second, it may be interesting to investigate how unanticipated non-monetary recognition influences employees’ perceptions of fairness immediately after recognition is bestowed and in future periods. Regarding the latter, it is possible that employees come to expect recognition and perceive their failure to receive it as unfair. However, we do not develop theory related to this aspect of our study; future research could delve deeper into this issue. Additional related questions exist; for instance, employees may come to expect unanticipated recognition in future periods, which could lead them to perceive the firm’s compensation system as unfair when recognition is not consistently provided. Investigating these related questions would increase our understanding of how the various dimensions of non-monetary recognition influence employees’ behavior, and add to practitioners’ and academics’ understanding of the factors that influence the net benefit non-monetary recognition within firms’ performance evaluation systems.
REFERENCES


APPENDIX A
Task Synopsis

The table below shows an excerpt from a hypothetical customer listing provided to participants.

Participants located the code or number for a pre-selected customer (i.e., “Melissa Craig” in the example below). Participants then entered one or more of the records in the corresponding box, and clicked an on-screen “Submit” button.

If participants entered a record in error, they were notified, and the error needed to be corrected before moving onto the next customer.

All participants received the same customer list, in the same order.

<table>
<thead>
<tr>
<th>Name</th>
<th>Customer Local Shopper Code</th>
<th>Customer Region Code</th>
<th>Customer Loyalty Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bob Smith</td>
<td>652142</td>
<td>151229</td>
<td>652331</td>
</tr>
<tr>
<td>Alex Robertson</td>
<td>316721</td>
<td>220120</td>
<td>624409</td>
</tr>
<tr>
<td>Jesse Vandali</td>
<td>120533</td>
<td>310119</td>
<td>851612</td>
</tr>
<tr>
<td>Melissa Craig</td>
<td>166510</td>
<td>010473</td>
<td>622243</td>
</tr>
<tr>
<td>Derek Jefferson</td>
<td>974824</td>
<td>061498</td>
<td>319822</td>
</tr>
</tbody>
</table>

Name: Melissa Craig

<table>
<thead>
<tr>
<th>Task A – Customer’s Region Code:</th>
<th>Task B – Customer’s Loyalty Number:</th>
<th>Task C – Customer’s Local Shopper Code:</th>
</tr>
</thead>
</table>
APPENDIX B
Manipulations

Anticipation Manipulation:

Participants in the Unanticipated condition received the following message prior to beginning Period 1:

Between Periods 1 and 2, you will receive a summary which indicates the breakout of the tasks you have accurately completed (Tasks A, Tasks B, and Tasks C), as well as total tasks accurately completed.

Participants within the Anticipated condition will receive the following message prior to beginning Period 1:

Between Periods 1 and 2, you will receive a summary which indicates the breakout of the tasks you have accurately completed (Tasks A, Tasks B, and Tasks C), as well as total tasks accurately completed.

In addition, the two employees within your division who complete the most total tasks will be recognized as the outstanding employees. This recognition will be provided publicly, via message, to your entire division.

Recognition Source Manipulation:

Recognition occurred via virtual message appearing on all division employees between periods. Below is the message:

Team,

I (We) just finished reviewing the COLOR division’s Period 1 performance, and I (we) believe it’s important to recognize {employee 1 identifier} and {employee 2 identifier} for their outstanding work as our division’s top performers. Please join me in appreciating them as valuable members of our team.

- COLOR Division Manager (Executive Committee)
Each experimental session was conducted with 20 participants, representing a single “firm.” The highest level of the firm within the experiment is the executive committee, which is comprised of the four division managers. Each division consists of the manager and four employees. Each division was identified by a color.
### FIGURE 2
Period 2 Task Payouts

<table>
<thead>
<tr>
<th>Task</th>
<th>Your Payout</th>
<th>Your Manager’s Payout</th>
<th>The Executive Committee Payout</th>
</tr>
</thead>
<tbody>
<tr>
<td>Task A – Per Record</td>
<td>£5</td>
<td>£1</td>
<td>£1</td>
</tr>
<tr>
<td>Task B – Per Record</td>
<td>£0</td>
<td>£5</td>
<td>£0</td>
</tr>
<tr>
<td>Task C – Per Record</td>
<td>£0</td>
<td>£0</td>
<td>£5</td>
</tr>
</tbody>
</table>

Participants received this table via an on-screen instruction (after period 1, but before period 2), as well as a hard-copy for their reference during period 2.

Payments per record are set in order to allow employees to recognize that Task A provides them with the greatest benefit, Task B provides their direct manager the greatest benefit, and Task C provides the executive committee the greatest benefit.
FIGURE 3
Experiment Session Timeline

Participants are assigned to employee/manager roles

Period 1

Employee Performs Tasks A,B,C
No monetary compensation

Anticipated Condition:
Employees told highest performer in period one will receive non-monetary recognition

High Performing Employees Recognized

Period 2

Employee performs Tasks A,B,C
Task dependent compensation

Non-Monetary Recognition Occurs:
Recognition occurs from the direct manager or executive committee

Post Experimental Questionnaire and Payment
FIGURE 4
Period 2 Reciprocal Effort – By Condition

Recognition Potential

Anticipated Unanticipated

Reciprocal Task Performance

Manager

Executive Committee
FIGURE 5
Period 2 Total Effort for Non-Recognized Employees – By Condition

Anticipated Unanticipated
Recognition Potential

Manager
Executive Committee
### TABLE 1
*Descriptive Statistics and Test of Hypothesis 1*

**Panel A: Descriptive Statistics - Pre-Recognition Performance mean [standard deviation]**

<table>
<thead>
<tr>
<th>Source of recognition</th>
<th>Anticipated Recognition</th>
<th>Unanticipated Recognition</th>
<th>Row Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Anticipated</td>
<td>Unanticipated</td>
<td></td>
</tr>
<tr>
<td></td>
<td>34.67</td>
<td>38.36</td>
<td>36.51</td>
</tr>
<tr>
<td></td>
<td>[14.94]</td>
<td>[14.93]</td>
<td>[14.95]</td>
</tr>
<tr>
<td></td>
<td>n =45</td>
<td>n =45</td>
<td>n =90</td>
</tr>
<tr>
<td>Manager</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive Committee</td>
<td>34.86</td>
<td>33.64</td>
<td>34.25</td>
</tr>
<tr>
<td></td>
<td>[13.65]</td>
<td>[17.41]</td>
<td>[15.55]</td>
</tr>
<tr>
<td></td>
<td>n =45</td>
<td>n =45</td>
<td>n =90</td>
</tr>
</tbody>
</table>

**Panel B: ANOVA Model of Pre-Recognition Performance**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipation</td>
<td>55.0069444</td>
<td>1</td>
<td>55.01</td>
<td>0.24</td>
<td>0.31</td>
</tr>
<tr>
<td>Source</td>
<td>184.5069444</td>
<td>1</td>
<td>184.51</td>
<td>0.79</td>
<td>0.38</td>
</tr>
<tr>
<td>Anticipation*Source</td>
<td>217.5625</td>
<td>1</td>
<td>217.56</td>
<td>0.93</td>
<td>0.34</td>
</tr>
<tr>
<td>Error</td>
<td>32756.91667</td>
<td>140</td>
<td>233.98</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P-values in **bold** are one-tailed.
TABLE 2  
Descriptive Statistics and Test of Hypothesis 2

Panel A: Descriptive Statistics - Recognized Employee's Reciprocity to Source mean [standard deviation]

<table>
<thead>
<tr>
<th>Source of recognition</th>
<th>Anticipated Recognition</th>
<th>Unanticipated Recognition</th>
<th>Row Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n =18</td>
<td>n =18</td>
<td>n =36</td>
</tr>
<tr>
<td>Executive Committee</td>
<td>7.11 [7.61]</td>
<td>6.27 [8.59]</td>
<td>6.69 [8.01]</td>
</tr>
<tr>
<td></td>
<td>n =18</td>
<td>n =18</td>
<td>n =36</td>
</tr>
<tr>
<td></td>
<td>n =36</td>
<td>n =36</td>
<td></td>
</tr>
</tbody>
</table>

Panel B: Contrast Coding

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast</td>
<td>1040.166667</td>
<td>1</td>
<td>1040.17</td>
<td>13.72</td>
<td>0.00</td>
</tr>
<tr>
<td>Residual</td>
<td>277</td>
<td>2</td>
<td>138.50</td>
<td>1.83</td>
<td>0.17</td>
</tr>
<tr>
<td>Error</td>
<td>5156.777778</td>
<td>68</td>
<td>75.83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Panel C: Simple Effects Tests

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of Anticipation given Manager is Source</td>
<td>283.361111</td>
<td>1</td>
<td>283.36</td>
<td>3.74</td>
<td>0.03</td>
</tr>
<tr>
<td>Effect of Anticipation given Executive Committee is Source</td>
<td>6.25</td>
<td>1</td>
<td>6.25</td>
<td>0.08</td>
<td>0.39</td>
</tr>
<tr>
<td>Effect of Recognition is Anticipated</td>
<td>169</td>
<td>1</td>
<td>169.00</td>
<td>2.23</td>
<td>0.07</td>
</tr>
<tr>
<td>Effect of Recognition is Unanticipated</td>
<td>1045.444444</td>
<td>1</td>
<td>1045.44</td>
<td>13.79</td>
<td>0.00</td>
</tr>
<tr>
<td>Error</td>
<td>5156.777778</td>
<td>68</td>
<td>75.83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P-values in **bold** are one-tailed.
TABLE 3
Descriptive Statistics and Analysis of Unrecognized Employees' - Period 2 Reciprocity

Panel A: Descriptive Statistics - Unrecognized Employee’s Reciprocity to Source mean [standard dev.]

<table>
<thead>
<tr>
<th>Source of recognition</th>
<th>Anticipated Recognition</th>
<th>Unanticipated Recognition</th>
<th>Row Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n =18</td>
<td>n =18</td>
<td>n =36</td>
</tr>
<tr>
<td>Executive Committee</td>
<td>7.56 [7.85]</td>
<td>7.28 [7.43]</td>
<td>7.42 [7.53]</td>
</tr>
<tr>
<td></td>
<td>n =18</td>
<td>n =18</td>
<td>n =36</td>
</tr>
</tbody>
</table>

Panel B: ANOVA model of Unrecognized Employee's Reciprocity to Source

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipation</td>
<td>9.38888889</td>
<td>1</td>
<td>9.39</td>
<td>0.19</td>
<td>0.67</td>
</tr>
<tr>
<td>Source</td>
<td>4.5</td>
<td>1</td>
<td>4.50</td>
<td>0.09</td>
<td>0.77</td>
</tr>
<tr>
<td>Anticipation*Source</td>
<td>3.55555556</td>
<td>1</td>
<td>3.56</td>
<td>0.07</td>
<td>0.79</td>
</tr>
<tr>
<td>Error</td>
<td>3416.555556</td>
<td>68</td>
<td>50.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 4
Descriptive Statistics and Analysis of Unrecognized Employees' - Period 2 Performance

**Panel A: Descriptive Statistics - Unrecognized Employee's Post-Recognition Performance mean [standard deviation]**

<table>
<thead>
<tr>
<th>Source of recognition</th>
<th>Anticipation of Recognition</th>
<th>Anticipated Recognition</th>
<th>Unanticipated Recognition</th>
<th>Row Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>n = 18</td>
<td>n = 18</td>
<td>n = 36</td>
</tr>
<tr>
<td>Executive Committee</td>
<td></td>
<td>38.94 [9.10]</td>
<td>34.78 [5.72]</td>
<td>36.86 [7.79]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>n = 18</td>
<td>n = 18</td>
<td>n = 36</td>
</tr>
<tr>
<td>Column Means</td>
<td></td>
<td>38.92 [8.49]</td>
<td>38.33 [7.91]</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>n = 36</td>
<td>n = 36</td>
<td></td>
</tr>
</tbody>
</table>

**Panel B: ANOVA model of Unrecognized Employee's Post-Recognition Performance**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anticipation</td>
<td>6.125</td>
<td>1</td>
<td>6.13</td>
<td>0.10</td>
<td>0.76</td>
</tr>
<tr>
<td>Source</td>
<td>224.0138889</td>
<td>1</td>
<td>224.01</td>
<td>3.58</td>
<td>0.06</td>
</tr>
<tr>
<td>Anticipation*Source</td>
<td>231.125</td>
<td>1</td>
<td>231.13</td>
<td>3.69</td>
<td>0.06</td>
</tr>
<tr>
<td>Error</td>
<td>4259.611111</td>
<td>68</td>
<td>62.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Panel C: Simple Effects Tests**

<table>
<thead>
<tr>
<th>Source of Variation</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F-stat</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effect of Anticipation given Executive Committee is Source</td>
<td>156.25</td>
<td>1</td>
<td>156.25</td>
<td>2.49</td>
<td>0.12</td>
</tr>
<tr>
<td>Effect of Anticipation given Manager is Source</td>
<td>81</td>
<td>1</td>
<td>81.00</td>
<td>1.29</td>
<td>0.26</td>
</tr>
<tr>
<td>Effect of Source given Recognition is Anticipated</td>
<td>0.0277778</td>
<td>1</td>
<td>0.03</td>
<td>0.00</td>
<td>0.98</td>
</tr>
<tr>
<td>Effect of Source given Recognition is Unanticipated</td>
<td>455.111111</td>
<td>1</td>
<td>455.11</td>
<td>7.27</td>
<td>0.01</td>
</tr>
<tr>
<td>Error</td>
<td>4259.611111</td>
<td>68</td>
<td>62.64</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

P-values in **bold** are one-tailed.