

Goal Setting Theory, Job Feedback, and OCB: Lessons From a Longitudinal Study

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This study examines the relationships among goal setting, job feedback, and employees' formal and informal performance. We argue that the knowledge gained in the field of goal setting may be useful in understanding organizational citizenship behavior (OCB), beyond formal performance. A longitudinal design based on two points in time (T1, T2) and four research stages (A-D) was developed to test a series of hypotheses among student-employees. 176 participants provided data on goal setting (goal specificity and goal difficulty) and on work attitudes (job satisfaction, organizational justice, job commitment) at T1 (stage A). 23 supervisors provided additional data on formal performance and OCB at T1 (stage B) and at T2 (stage D). Employees were given feedback regarding their formal and informal work performance between T1 and T2 (stage C). The results generally support a positive relationship between goal setting, formal performance, and altruistic OCB at T1 but not at T2. Furthermore, job feedback was related to formal performance and to altruistic and compliance OCB at T2. Implications of these findings are discussed in both the context of goal setting theory and the ongoing study of OCB.

Goal setting theory, which has strongly influenced organizational behavior ideology and practice since the late 1960s (Latham & Yukl, 1975; Locke, 1968), noted how goal clarity and goal difficulty positively affect formal job performance. The Management by Objectives (MBO) doctrine further highlighted these principles and suggested a clear strategy for practical applications of goal setting theory in the workplace (Drucker, 1974). MBO is a motivating tool that uses goal setting theory to enhance personal, and ultimately, organizational performance. MBO follows four main principles: (1) The manager and employee establish the employee's performance goals; (2) These goals are consistent with the organization's objectives; (3) Benchmarks or targets are established to measure the employee's progress, and; (4) Periodic meetings are held to review the employee's progress toward the goals and to provide feedback. At several points in time, the performance is evaluated and reported to managers and employees alike.

During the ensuing decades, many studies examined the relationship between goals and performance in organizations, with most of them focusing on formal job duties and responsibilities (i.e., Audia, Brown, Kristof-Brown, & Locke, 1996; Jessup & Stahelski, 1999; Locke & Latham, 1990; Locke, Shaw, Saari, & Latham, 1981; Yukl & Latham, 1978). However, studies have paid only scant attention to the relationship between MBO, goal setting, and the general psychological contract that employees may have with the organization (Katz & Kahn, 1978; Rousseau, 1989; Rousseau & Tijoriwala, 1998). They also largely overlooked the effect of goals on contextual performance (Organ, 1997) such as pro-social behavior or Organizational Citizenship Behavior (OCB).

The primary goal of this study is to contribute to the goals-performance literature in several ways: (1) by testing other aspects of OCB that have not yet been tested in relation to goal setting theory; (2) by examining the possible effect of job feedback on various aspects of employees' OCB; (3) by comparing the contribution of the independent variables to the explanation of the outcome variables across two points in time (T1 and T2) using a longitudinal, four-stage research design.

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LITERATURE REVIEW AND HYPOTHESES

Goal Setting Theory and Performance

MBO and goal setting theory became a prominent field of study in organizational behavior because many studies empirically confirmed that goals are key in setting up a positive organizational climate, enhancing team spirit, providing social support, improving job attachment, and enhancing performance (Erez, 1986; Latham & Yukl, 1975; Locke & Latham, 1990). Locke (1968) suggested two main concepts in this context: *goal difficulty* and *goal specificity*. Later studies have suggested that difficult goals, if well accepted by organizational members, may lead to greater individual effort and persistence (Locke et al., 1981; Locke & Latham, 1990). Locke's basic premise is that an individual's conscious intentions regulate his/her actions, and a goal is simply what the individual is consciously trying to accomplish. Thus, ambitious goals result in a higher level of performance than easy goals, and specific, ambitious goals result in a higher level of performance than no goals or a generalized goal of "do your best" (Latham & Yukl, 1975; Yukl & Latham, 1978). Goals are therefore associated with enhanced performance because they mobilize effort, direct attention, and encourage persistence and strategy development (Locke & Latham, 1990).

Wright, George, Farnsworth, and McMahon (1993) tried to relate goals with extra-role or contextual/informal performance. They employed the resource allocation idea to explain why in some cases goals may lead to a lower level of altruistic OCB. According to their view, individuals have limited resources that are first targeted at fulfilling formal job duties. When these duties and goals are ambitious, little energy remains for other altruistic behaviors that are beyond the formal job requirements. Their study examined 154 subjects who worked on an order-processing task and was unique in several ways: (1) it focused on monetary incentives to employees; (2) it focused on a manufacturing/clerical task-oriented experiment; (3) it revealed only secondary negative effects relevant to those strongly committed to the task with quite marginal significance and a low level of explained variance (7%); and (4) it revealed an unusual negative relationship between formal performance and OCB ($r = -.34$; $p < .01$), which contradicts most of the studies on OCB that found a positive relationship between these variables at the Pearson's r level of .30 to .40 (see, for example, Organ & Ryan, 1995; LePine, Erez, Johnson, 2002).

While ambitious (but realistic) goals at the individual level are effective because they indicate the level of effort and motivation needed to achieve acceptable performance, specific formal goals provide employees with an

additional guide to expected minimum performance levels. Clear, specified, and formal goals are different from ambiguous goals or from other goals that represent the "informal spirit" of the organization. The latter do not make clear the appropriate performance level or indicate to individuals that a range of performance levels is acceptable (Locke & Latham, 1990). Thus, clear, formal goals define a framework within specific behaviors and actions that are consistent with management's formal expectations (Katz & Kahn, 1978). Other questions, however, remain unclear in this regard. Do ambitious and clear goals also affect the psychological contract in the organization (i.e., Rousseau, 1989; Rousseau & Tijoriwala, 1998) or the contextual/informal performance in the organization and if so, how and to what extent? As suggested above, the study by Wright et al. (1993) has taken the first step towards answering this question by building on the logic of a negative relationship between setting formal goals and OCB. Building on Vroom's (1964) expectancy theory as well as on more recent studies (i.e., Shalley, 1991; Staw & Boettger, 1990), their study suggested that "strong emphasis placed on prescribed behavior may reduce the occurrence of other desired behavior" (p. 375).

Rethinking the Relationship Between Goal Setting and OCB

If goal difficulty and goal clarity define a desired performance that is expected from organizational members, they may also indirectly define the psychological contract and the extra-value behavior of these individuals that is beyond this minimal or formal expected level of performance. Thus, when the formal framework is clearer to employees, the contextual/informal space also becomes much clearer, and employees have the option of choosing whether to exert such behaviors or withhold them.

The question of differentiation between the formal and the informal task domains in organizations, especially in the context of OCB, was discussed extensively by Morrison (1994). Her study suggested that the boundaries between what is considered "must do" and what is treated as "voluntary actions" in the workplace are not clearly defined and may be different for various organizations, jobs, employees, or managers. Each has his/her own perception about where exactly the formal limits lie. The Morrison (1994) study, as well as more updated definitions of OCB (Organ, 1997; Podsakoff, MacKenzie, Paine, & Bachrach, 2000), may also imply that the goal setting approach clarifies the definition of "formal" and "informal" Whatever is included under the category of specific goals may be considered among the formal duties of employees, while other duties not specifically mentioned in the goal setting process should be considered informal/

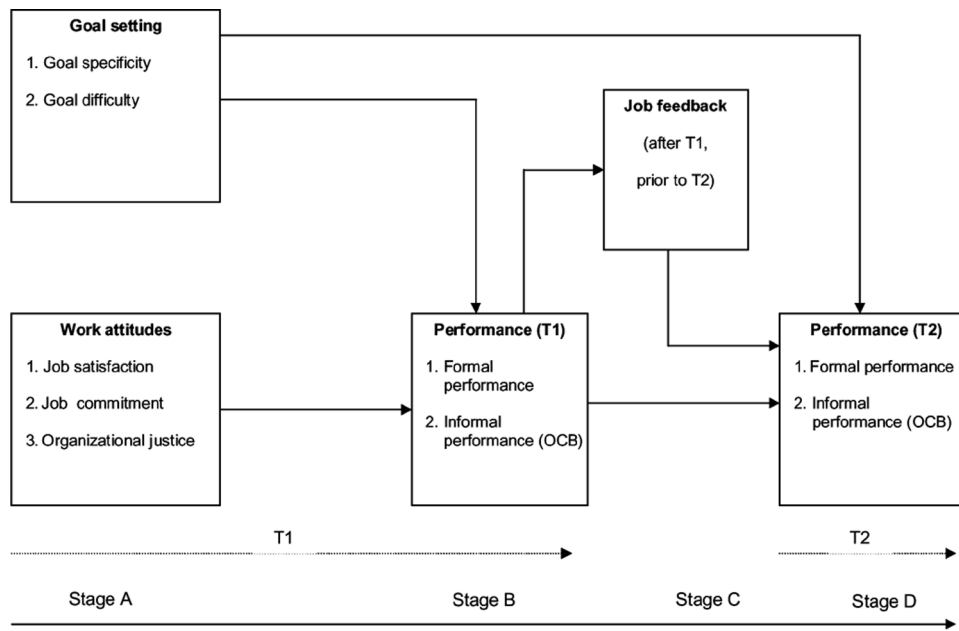


FIGURE 1 Goal setting theory, job feedback, and OCB: A theoretical model.

contextual/OCB actions. Thus, a goal setting approach defines the minimum expected effort. From that point onward, any additional action is considered “good will” or “going the extra mile” (Morrison, 1994), or OCB (Organ, 1988; Podsakoff et al., 2000).

Building on the rationale developed thus far, Figure 1 presents our research model that suggests a relationship between goal setting, work attitudes, job feedback, formal performance and contextual/informal performance/OCB. In this model, goal setting and job feedback play a unique role in determining performance over time (T1, T2). According to various studies, the major work attitudes that should be controlled for in studies on OCB are job satisfaction, organizational commitment, and organizational justice (Farh, Podsakoff, & Organ, 1990; LePine et al., 2002; Moorman, Niehoff, & Organ, 1993; Niehoff & Moorman, 1993; Organ & Ryan, 1995; Vigoda, 2000; Williams & Anderson, 1991). Thus, we decided to include these variables in our study with the expectation that highly satisfied and committed employees, as well as those who feel that the organization treats them fairly will demonstrate higher levels of formal and informal performance.

Building on Kanfer (1991) and Wright et al., (1993), we suggest the resource allocation approach will predict a negative relationship between goal setting and OCB. As formal work duties become clearer, there will be less available energy and motivation to perform above the required level, so OCB will decline. Thus, we expected a positive relationship between goal setting and formal performance, but a negative relationship between goal setting and OCB. We suggest that goal setting helps both

employees and managers distinguish between the formal and the informal aspects of work, a distinction that indirectly and negatively affects OCB. In addition, we argue that goal setting adds to our understanding of OCB and formal performance beyond other work attitudes. The rationale for this argument is that goal setting refers to actual desired *behaviors* (usually formal activities) that are beyond the general *perceptions* and “state of mind” of employees as described in work attitudes. The power of goal setting in explaining performance is demonstrated in many studies (i.e., Fang, Evans, & Zou, 2005; Wilk & Redmon, 1998). Given that work attitudes may be unstable and subject to change based on transitory events in the organizational environment, we propose that goals that are directly conveyed to individuals will add to our understanding of performance beyond the effect of work attitudes such as job satisfaction, organizational commitment, and organizational justice. Hence, we propose the following hypotheses:

H1a: Goal setting will be positively related to formal performance and negatively related to OCB when measured at T1.

H1b: Goal setting will be a significant predictor of formal performance and OCB beyond other work attitudes (job satisfaction, job commitment, and organizational justice) when measured at T1.

Locke (1968) also proposed that job feedback, among other factors, is crucial for a better understanding of the goals-performance relationship. Performance feedback

or “knowledge of results” can lead to increased effort and performance for at least four reasons: (1) feedback may induce a person who previously did not have specific goals to set a goal to improve performance by a certain amount; (2) feedback may induce a person to raise his/her goal level after attaining a previous goal; (3) feedback that informs a person that his/her current level of effort is insufficient to attain his/her goal may increase his/her efforts; and (4) feedback may inform a person about ways to improve his/her methods of performing the task (Latham & Yukl, 1975). Similarly, Erez (1977) defined feedback as a necessary condition for the goal setting-performance relationship. Renn and Fedor’s (2001) field study examined the relationship among feedback, social cognitive, goal setting, and performance in 136 sales and customer-service representatives. The desire for feedback and self-efficacy related to two dimensions of work performance through feedback-based goals. Note, however, that the form of feedback (i.e., oral or written) and its quality (i.e., detailed or general) as well as the level of goal commitment after feedback may also affect the feedback’s outcomes (Klein, Wesson, Hollenbeck, & Alge, 1999; Sue-Chan & Ong, 2002).

Nonetheless, only a few studies have examined the relationship between feedback and OCB. The earliest study we found was Funderburg and Levy (1997), who pointed to no significant relationships between feedback and OCB. Bachrach, Bendoly, and Podsakoff, (2001), however, found a relationship between feedback and civic virtue as well as between feedback and helping behavior. A recent study by Klein (2003) further supported this notion, indicating that providing feedback on achievements may redirect employees to engaging in positive social behaviors in the workplace. Whereas some of the above studies suggested feedback as a moderator in the relationship between goals and performance, we decided to focus on its main effect in a time-based study. Hence, based on the increasing centrality of feedback for managers and employees in MBO strategies, we suggest that when employees are provided with feedback about both formal and informal performance, they will put more effort into increasing their formal performance and OCB in the future. This idea is also in line with the study by Erez (1977) who emphasized the contribution of feedback beyond any standard goal setting strategy. Goal setting by itself is not sufficient, and adequate feedback is needed to continuously improve performance or maintain it at a desired level. Thus, we propose two additional hypotheses:

H2a: Goal setting will be positively related to formal performance and negatively related to OCB when measured at T2.

H2b: Job feedback will be positively related to formal performance and to OCB. Job feedback adds to

the explanation of formal performance and OCB beyond goal setting, at T2.

Finally, we suggest a summarizing hypothesis that clear and ambitious goals together with adequate job feedback improve employees’ performance over time. Here we followed the idea of a psychological contract suggested by Rousseau (1989) and Rousseau and Tijoriwala (1998) who highlighted the importance of equitable relationships, the development of psychological reciprocity between employees and managers over time, and the enhancement of a beneficial psychological agreement among them. We also followed Locke (1968) and more recent works that established the relationship between goal setting, job feedback, and various types of organizational performance, both formal or informal ones (Bachrach et al., 2001; Klein, 2003; Klein et al., 1999; Renn & Fedor, 2001). Two additional ideas support this hypothesis. First, we expect that the goal setting effect will take time and that performance will be affected by goals only after several months during which the employees adjust to the needs and demands set by the managers. Second, the notion of a psychological contract may explain the fact that job feedback on both formal performance and OCB increased the level of performance at T2. Perhaps employees were trying harder to meet the expectations of their managers. Support for the above reasoning can be found in the expectancy theory (Vroom, 1964) as well as in the person-organization-fit (POF) theory that argues for a better match between the needs and values of individuals and organizations as a way to improve organizational outcomes (Chatman, 1991; O’Reilly, Chatman, & Caldwell, 1991).

H3: Formal performance and OCB will be higher at T2 than at T1.

METHOD

Sample and Procedure

The study was conducted between February and August 2003. Participants were students employed under a short-term contract (between 12 and 36 months) in a social service project dedicated to helping needy children in the northern neighborhoods of Haifa, in Israel. The supervisors of these student-employees also took part in the study. First, a pre-test study was conducted during February 2003, to ensure the validity and reliability of the research tools, especially the goal setting scale. Based on the pre-test, final versions of the questionnaires were created and distributed to several qualified academic experts and to managers in the studied organizations to ensure clarity and validity. The data for this study were collected at two points in time (T1, T2)

and over four stages (A to D). Data collected at T1 were based on employees' responses (stage A) and on supervisors' evaluations (stage B). Data collected at T2 were based on stages C and D. At stage C, supervisors provided oral feedback to employees on their recent performances, both formal and informal ones. At stage D, supervisors re-evaluated employees' performance.

During late February 2003, we asked 260 employed students to take part in our study, and 176 of them responded positively, a return rate of 68%. The average age was 24.52 years (*s.d.* = 2.34), and the average years of education was 14 (*s.d.* = 1.42). Of the respondents, 34% were men and 12% were married. These individuals completed a questionnaire that included most of the independent variables such as goal setting (goal specificity and goal difficulty), job commitment, job satisfaction, organizational justice, and demographic variables. We used a direct distribution and return method to increase the return rate. Soon after that, 23 supervisors of these student-employees were asked to take part and complete an individual performance scorecard evaluation for each individual who participated. These supervisors came from 13 different organizations in which the students were employed. Each supervisor evaluated between five and ten individuals. Matching the two sets of questionnaires was done using a specific code printed on the stage A questionnaires. Note that participation in the study was strictly voluntary, and all those who agreed to take part were assured of the full confidentiality of the data.

In March 2003, we implemented stage C of the study, where supervisors provided performance feedback to those employees who had taken part in stage A. The feedback included information about formal goal attainment and about other informal behaviors such as supporting others and the organizations beyond what was formally required. It is noteworthy that the goals were presented to the participants several months earlier, at the beginning of the project in October 2003. Thus, feedback was actually provided to the employees some five months later. The goals were expected to be reached gradually over the course of the project and participants were aware of the mid-term evaluations and the feedback process. The final stage of the study (stage D), conducted during July and August 2003, included re-assessments of employees' performance by the same supervisors who had participated in stage B.

Independent Variables

Goal setting. This variable included two sub-scales called goal specificity (10 items) and goal difficulty (7 items) that were suggested by Locke et al. (1981). Sample items are: (1) "I understand exactly what I am supposed to do on my job;" and (2) "My goals are

much too difficult;" The scale ranged from 1 (strongly disagree) to 5 (strongly agree), and reliability was .85.

Job satisfaction. A six-item scale taken from Schriesheim and Tsui (1980) was used to indicate how satisfied respondents were with their current job, co-workers, supervisors, current salary, opportunities for promotion, and work in general. The scale for these questions ranged from 1 (very unsatisfied) to 5 (very satisfied), and reliability was .83.

Job commitment. A five-item version of job commitment from Van Der Vegt, Emans, and Van De Vliert, (2000) was used. Sample item is "I feel personally responsible for my work performance." The scale for this measure ranged from 1 (strongly disagree) to 5 (strongly agree), and its reliability was .76.

Organizational justice. A seven-item scale taken from Niehoff and Moorman (1993) was applied and represented both procedural justice (PJ) and distributive justice (DJ; Moorman, 1991). Sample items are: (1) "All job decisions are applied consistently across all affected employees" (PJ); and (2) "I think that my level of pay is fair" (DJ); The integrated scale for this measure ranged from 1 (strongly disagree) to 5 (strongly agree), and reliability was .83.

Job feedback. Job feedback was defined as providing credible information about the results of one's performance so that individuals could regulate their efforts in real time (Pritchard, Jones, Roth, Stuebing, & Ekeberg, 1988). We used the organization's internal method of feedback to employees to obtain a personal score for each individual. The feedback scorecard, consisting of 20 close-ended questions, was answered by immediate supervisors and presented to employees at a one-on-one feedback meeting. The feedback included information on both the employee's formal and informal performance. Sample question is "The employee is cooperative and creative." Responses were made on a five-point scale ranging from 1 (never true) to 5 (always true). No reliability figure is available for this scale, as it was based on the internal records of the organizations that allowed us to use a final score for each employee.

Dependent Variables

Formal performance and OCB. ¹Our scale was primarily based on the scale used by Williams and

¹The full scale is available upon request directly from the authors.

Anderson (1991) and Organ and Konovsky (1989), as well as on suggestions made by Morrison (1994). Like these studies, we applied a 20-item scale representing OCB and formal behaviors. Supervisors completed a questionnaire in which they were asked to evaluate the recent behavior of each employee. Each item was measured on a scale ranging from 1 (never) to 5 (always). The mixed scale was created to better define the boundaries between the two performance measures, which are sometimes difficult to distinguish. The OCB scale included two major factors: *altruistic OCB* and *compliance OCB*.

According to Levinson (2003), the OCB scale reflects the supervisors' differentiation of three types of performance: one for formal performance and two for OCB. Therefore, a principal component exploratory factor analysis with varimax rotation was conducted separately for the performance data collected at stages B (T1) and D (T2). In both stages, we discerned three clear factors: (1) formal performance – six items ($\alpha = .93$; $R^2 = 35.68\%$ and $\alpha = .89$; $R^2 = 31.69\%$ at T1 and T2 repeatedly); sample item is “adequately completes assigned duties;” (2) altruistic OCB – six items ($\alpha = .98$; $R^2 = 13.85\%$; and $\alpha = .88$; $R^2 = 15.21\%$ at T1 and T2 repeatedly); sample item is “helps others who have heavy work loads;” (3) compliance OCB – five items ($\alpha = .81$; $R^2 = 7.04\%$; and $\alpha = .83$; $R^2 = 7.13\%$ at T1 and T2 repeatedly); sample item is “gives advanced notice when unable to come to work.” Finally, three items were omitted from our original list of 20 items, as they had no clear-cut loading on any of the three factors. We thus decided to analyze the three dimensions of performance as distinct but also related constructs.

Personal influences. Two personal variables were included here for purposes of control; gender (0 = men, 1 = women) and age, which was measured as a continuous variable (years).

FINDINGS

Table 1 presents Pearson's r correlations among the research variables as well as the Cronbach alphas. As can be seen, most of these zero-order correlations work in the expected directions, and reliabilities range between .76 and .93, which are well above the minimum standard of .60.

Table 2 presents the analyses conducted at T1 (based on data collected at stages A and B). Three separate hierarchical regression analyses were used to test H1a and H1b. The first equation regressed formal performance on the independent variables, while the second and third equations regressed altruistic OCB and compliance OCB on the independent variables. Job satisfaction was positively related to all the outcome variables in the second step of the regressions ($\beta = .29$; $p \leq .01$; $\beta = .25$; $p \leq .01$, $\beta = .29$; $p \leq .01$ for formal performance, altruistic OCB, and compliance OCB respectively). However, in the final third step of the equation these relationships remained solid only for compliance OCB ($\beta = .25$; $p \leq .05$). Job commitment was positively related to formal performance ($\beta = .21$; $p \leq .01$) and organizational justice had no relationship with any of the dependent variables. These findings partially support H1b for job satisfaction and job commitment, but not for organizational justice.

TABLE 1
Descriptive Statistics and Intercorrelation Matrix for the Research Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
Independent variables															
1. Gender (0 = men)			—												
2. Age	24.52	2.34	.02	—											
3. Job commitment	4.43	.51	.19**	-.02	.76										
4. Job satisfaction	3.90	.60	.03	.05	.32***	.83									
5. Organizational justice	3.90	.62	-.02	-.03	.27***	.66***	.83								
6. Goal setting	3.98	.51	-.05	.10	.22*	.62***	.59***	.85							
Dependent variables															
7. Formal performance (T1)	4.47	.65	.09	.08	.32***	.39***	.28***	.43***	.93						
8. Altruistic OCB (T1)	3.63	.85	-.10	.12	.19**	.27***	.18**	.27***	.39***	.89					
9. Compliance OCB (T1)	4.49	.60	.04	-.09	.17**	.27***	.15*	.12*	.52***	.34***	.81				
10. Job feedback	7.88	1.2	.00	.13	.26***	.43***	.34***	.45***	.86***	.56***	.64***	—			
11. Formal performance (T2)	4.64	.51	.04	.02	.21**	.26***	.14*	.16*	.60***	.08	.34***	.51***	.89		
12. Altruistic OCB (T2)	4.07	.70	-.12	.22**	.04	.13*	.11	.16*	.34***	.59***	.18*	.45***	.30***	.88	
13. Compliance OCB (T2)	4.71	.53	.07	.02	.05	.00	-.13	-.07	.22**	.19**	.37***	.21**	.18*	.28***	.83

Note. N = 148–176 as a result of missing values. T1 = Time 1; OCB = organizational citizenship behavior; T2 = Time 2.
* $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

TABLE 2
Multiple Hierarchical Regression Analysis (Standardized Coefficients) for the Impact of Work Attitudes and Goal Setting on Performance

Variable	Step 1			Step 2			Step 3		
	Formal Performance	Altruistic OCB	Compliance OCB	Formal Performance	Altruistic OCB	Compliance OCB	Formal Performance	Altruistic OCB	Compliance OCB
Age	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Gender	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Job commitment				.21 (2.70**)	<i>ns</i>	<i>ns</i>	.21 (2.70**)	<i>ns</i>	<i>ns</i>
Job satisfaction				.29 (2.95**)	.28 (2.82**)	.29 (2.78**)	<i>ns</i>	<i>ns</i>	.25 (2.25*)
Organizational justice				<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Goal setting							.32 (3.39***)	.21 (1.98*)	<i>ns</i>
R^2	.02	.02	.01	.20	.12	.10	.26	.14	.10
Adjusted R^2	.01	.01	.00	.18	.09	.07	.23	.11	.06
F	1.14	1.84	.83	7.73***	4.14***	3.23*	8.81***	4.17***	2.70*
ΔR^2				.18	.10	.09	.06	.02	.00
F for ΔR^2				11.82***	5.57***	3.54*	11.85***	3.90*	.58

Note. $N = 148-176$ as a result of missing values. Values in parentheses are Time 1 t test results. OCB = organizational citizenship behavior. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

Goal setting was positively related to formal performance and to altruistic OCB ($\beta = .32$; $p \leq .001$ and $\beta = .21$; $p \leq .05$ respectively), but not to compliance OCB. This finding supports H1a for the formal performance variable. However, it does not support H1a for the compliance OCB variable and even contradicts H1a for the altruistic OCB variable. In addition, the increase in the explained variance made by goal setting (beyond the explained variance made by work attitudes and other demographics) was significant for both formal performance and altruistic OCB. First, whereas work attitudes and the demographic variables contributed 20%, goal setting made an additional significant contribution of 6% to the explanation of formal performance, setting it at a total score of 26%. Second, whereas work attitudes and the demographic variables contributed 12%, goal setting made an additional significant

contribution of 2% to the explanation of altruistic OCB, setting it at a level of 14%. These findings support H1b for the variables of formal performance and altruistic OCB but not for compliance OCB.

Tables 3 presents the analyses conducted at T2 (stages C and D). As this table clearly shows, job feedback had a strong positive relationship with all the outcome variables ($\beta = .51$; $p \leq .001$, $\beta = .47$; $p \leq .001$, $\beta = .30$; $p \leq .01$ with formal performance, altruistic OCB, and compliance OCB respectively). These findings fully support the first part of H2b. Goal setting was not related to any of the dependent variables at T2. This finding provides no support for H2a. In addition, the contribution of job feedback to the explained variance of the outcome variables was significant and impressive. Job feedback added 24% to the explained variance of formal performance, setting it at a total of 28%.

TABLE 3
Multiple Hierarchical Regression Analysis (Standardized Coefficients) for the Impact of Goal Setting and Job Feedback on Performance

Variable	Step 1			Step 2			Step 3		
	Formal Performance	Altruistic OCB	Compliance OCB	Formal Performance	Altruistic OCB	Compliance OCB	Formal Performance	Altruistic OCB	Compliance OCB
Age	<i>ns</i>	.22 (2.51*)	<i>ns</i>	<i>ns</i>	.21 (2.41*)	<i>ns</i>	<i>ns</i>	.16 (2.05*)	<i>ns</i>
Gender	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Job commitment	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Job satisfaction	.26 (2.24*)	<i>ns</i>	<i>ns</i>	.25 (2.05*)	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Organizational justice	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Goal setting				<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>	<i>ns</i>
Job feedback							.51 (5.85***)	.47 (5.25***)	.30 (3.18**)
R^2	.09	.08	.04	.09	.08	.04	.28	.25	.10
Adjusted R^2	.06	.05	.00	.05	.04	.01	.24	.21	.05
F	2.55*	2.28*	.94	2.11	1.95	.81	7.17***	5.97***	2.10*
ΔR^2							.19	.17	.07
F for ΔR^2					.38	.16	34.22***	27.61***	9.51**

Note. $N = 148-176$ as a result of missing values. Values in parentheses are Time 2 t test results. OCB = organizational citizenship behavior. * $p \leq .05$. ** $p \leq .01$. *** $p \leq .001$.

TABLE 4

Dependent *t*- Test for the Comparison of Formal Performance and OCB across T1 and T2

Variable	T1		T2		Dependent <i>t</i> -test (<i>df</i> = 149)
	<i>M</i>	(<i>SD</i>)	<i>M</i>	(<i>SD</i>)	
Formal performance	4.51	.61	4.64	.51	-3.21*
Altruistic OCB	3.69	.86	4.08	.70	-6.67***
Compliance OCB	4.55	.86	4.71	.53	-3.30**

N = 148–176 as a result of missing values. OCB = organizational citizenship behavior; T1 = Time 1; T2 = Time 2.

Note. **p* ≤ .05. ***p* ≤ .01. ****p* ≤ .001.

It added 17% to the explained variance of altruistic OCB, setting it at a total of 25%. Finally, it added 7% to the explained variance of compliance OCB, setting it at a total of 10%. These findings fully support H2b that highlighted the significance of job feedback in explaining work outcomes. Note also that of the demographic variables, only age had a positive relationship with altruistic OCB ($\beta = .16$; $p \leq .05$), which may imply that such behaviors are more prevalent among older employees.

Finally, Table 4 presents a dependent *t*-test that was designed to examine the change in supervisors' evaluations for employees' performance across T1 and T2. This table shows that both formal performance and OCB was higher at T2 than at T1. The overall mean for formal performance rose from 4.51 at T1 to 4.64 at T2 ($t = -3.21$; $p \leq .05$). The overall mean for altruistic OCB rose from 3.69 at T1 to 4.08 at T2 ($t = -6.67$; $p \leq .001$). The overall mean for compliance OCB rose from 4.55 at T1 to 4.7 at T2 ($t = -3.30$; $p \leq .01$). The findings support Hypothesis H3 and may indicate that goal setting and the job feedback that follows it are both important stages that can improve both formal and informal workplace performance. Moreover, also note that the improvement in both OCB aspects was higher than the improvement in formal performance, a finding that may indicate that goal setting and job feedback enhance informal behaviors in organizations beyond their contribution to formal performances.

DISCUSSION AND SUMMARY

The argument that setting specific, difficult goals increases performance significantly over the vague approach of "do your best" is one of the most robust findings in the behavioral sciences and has contributed significantly to the theory of goal setting and the MBO approach (Drucker, 1974; Latham & Seijts, 1999). Locke and Latham (1990) conducted an extensive analysis of 201 past studies in which more than 40,000 individuals participated and concluded that 183 studies (91%) supported this relationship. So far, the

conventional knowledge in management thinking, based on goal setting theory, suggests that clearer goals and more challenging tasks at work enhance formal performance and increase organizational productivity and effectiveness at various levels. Following Wright et al. (1993), we hypothesized that MBO and goal setting theory at the individual level can be extended to explain additional aspects of employees' work outcomes, such as organizational citizenship behavior (OCB), which reflect a different and more ambitious psychological contract with the organization (Rousseau, 1989; Rousseau & Tijoriwala, 1998).

Our T1 findings contradict those of Wright et al. (1993), and our T2 data do not support them. We found a positive relationship between goal setting and altruistic OCB at T1 and no relationship between either facets of OCB at T2. Based on the arguments suggested by Morrison (1994), perhaps the differences between our results and those of Wright et al. may be traced back to the task orientation and to the setting where the study was conducted. Moreover, as also suggested by Wright et al. (1993), when one's tasks and performance are more related to co-workers' tasks and performance, one would expect a different relationship between goal setting and OCB due to the close social relationships among employees. In our study, the tasks required from the employees were very intertwined (e.g., providing social support to children in need, communicating with them and with other partners) and may explain the positive relationships with altruistic OCB. However, the fact that no relationship was found between goal setting and OCB at T2 is still puzzling and should be re-examined in future studies.

Note also the positive relationship found in our study between formal performance and OCB at both T1 and T2, which ranged between .18 and .59, and indicates that OCB did not come at the expense of formal performance. This is a major difference compared with the Wright et al. study and, in light of the study by Morrison (1994), challenges the former's generalization. Thus, we suggest that the resource allocation theory has an important, yet limited, ability to explain the relationship between goal setting and OCB, especially over time and in various settings. We recommend that other studies explore this relationship further.

Our study also contributed to the understanding of job feedback as a good predictor of OCB. Note, however, that in our study employees were provided with direct feedback about informal activities, beyond the standard feedback about formal performance. This may explain the relationships found between feedback and both aspects of performance at T2. The contribution of job feedback to the explanation of employees' performance was found to be stronger and more consistent than the one made by goal setting. These findings

support current knowledge about formal behavior in organizations (Ilgen, Fisher, & Taylor, 1979), but also extend them to the arena of OCB. Thus, we concluded that the feedback method used in this study may have encouraged employees to engage in future OCB.

The study also has some practical implications for managers. First, one may argue that good management as reflected in clearer expectations from managers may result in lower levels of OCB. Second, our study supports the contention noted in previous studies (Latham & Yukl, 1975; Locke, 1968) that goal setting is incomplete without adequate job feedback. Thus, managers should consider the positive effect of feedback on formal performance, but even more importantly, on informal work behaviors such as altruistic OCB or compliance OCB.

Some limitations of our study and design should also be mentioned. First, our sample is quite homogeneous and its size is small. It is also possible that the students who agreed to take part in the study were atypical "good citizens." However, a comparison of the demographics of those who participated and those who did not found no significant differences between the groups, which reduces the likelihood of bias. Future studies will likely benefit from testing our model on larger and more heterogeneous samples of employees who have longer work contracts than ours had. Second, we had no way to manipulate the way goals or feedback were presented to the participants. It is possible that the goals could have been insufficiently specific and that the feedback process suffered from other limitations. Third, we are aware of the possibility that the supervisors' ratings of employees' performance at stage D may have been affected by their own evaluations at stage B. We have tried to overcome this "learning effect" by allowing enough time to elapse between stage B and D (about 5 months). However, some may consider this insufficient, and thus we recommend that future studies implement other strategies (i.e., a Solomon 4 group research setting; Solomon, 1954) to ensure no such bias. Finally, while we have used a longitudinal research design, we still suggest that any conclusions regarding causality be treated with caution.

Therefore, future research would benefit from: (1) better control over other possible factors such as organizational type, type of tasks, or type of work environment; (2) testing our model at other levels than the individual one, namely the group or the organization, and using multiple sources of information about this behavior (i.e., Turnipseed & Rassuli, 2005; Vandenberg, Lance, & Taylor, 2004); (3) applying more advanced statistical analyses that are useful in testing causality (i.e., SEM - Structural Equation Modeling; Kline, 2005) before drawing firm causal conclusions; (4) replicating our study in other organizational settings that are social-service oriented, in other sectors (private

and non-profit), and in other cultures; and (5) including additional variables (i.e., leader member exchange [LMX], leadership, personality types) that have been found significant in previous studies on goal setting, job feedback and OCB.

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