

# Organizational Citizenship Behaviors as a Function of Empathy, Consideration of Future Consequences, and Employee Time Horizon: An Initial Exploration Using an In-Basket Simulation of OCBs<sup>1</sup>

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We hypothesized that organizational citizenship behaviors (OCBs) represent a social dilemma. Two studies supported this hypothesis. In Study 1, participants rated OCBs as costly to an employee in the short run, and beneficial to an organization in the long run. In Study 2, likelihood of engaging in OCBs was higher among those high in empathy and concern with future consequences; and less likely among those instructed to imagine they would be leaving the company in 3 months for another job. Empathy showed a stronger relationship with OCBs when respondents imagined they would soon leave an organization and that individuals high in concern with future consequences were less likely to engage in OCBs when faced with a short-term time horizon.

Organizations often benefit when their employees are willing to contribute to the organization above and beyond their formally defined job descriptions. These so-called *organizational citizenship behaviors* (OCBs) come in variety of forms, including helping behavior, sportsmanship, loyalty, organizational compliance, individual initiative, civic virtue, and self-development (Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Equally important to organizations are those negative behaviors that fall below

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routine expectations (cf. Hopper & Mitchell, 1995). These so-called non-compliance behaviors (NCBs) can also come in a variety of forms, including neglect, substandard performance, or active resistance. Given their relevance to organizations, understanding the causes of OCBs (and NCBs) is clearly an important task.

In this paper, we attempt to shed light on the underlying nature and causes of OCBs (and NCBs) by highlighting their overlap with a class of decisions known as *social dilemmas*, broadly defined as situations in which short-term personal interests are at odds with long-term collective interests (Dawes & Messick, 2000; Komorita & Parks, 1994; Messick & Brewer, 1983). Our general hypothesis is that the decision to engage in OCBs represents a tradeoff between short-term individual costs and long-term collective benefits, a type of dilemma known as a *social (delayed) fence*; whereas the decision to engage in NCBs represents a tradeoff between short-term individual benefits and long-term collective costs, a type of dilemma known as a *social (delayed) trap*. We evaluate this general hypothesis in two ways. First, we assess whether decision makers view OCBs and NCBs as social fences and social traps, respectively. Second, based on a social dilemma analysis, we derive and test a number of hypotheses concerning the determinants of OCBs and NCBs.

### OCBs and Related Constructs

The term OCB was first defined by Organ (1988) as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization” (p. 4). Since Organ’s definition, the conceptualization of OCBs has expanded. For example, while Organ stated that OCBs are not recognized by the formal reward systems in organizations, the empirical evidence indicates that managers do take OCBs into account when administering rewards (cf. Podsakoff et al., 2000). Also, while Organ initially conceptualized OCBs as consisting of only those behaviors that are not part of the job description (i.e., OCBs are extra-role behaviors), the individual initiative dimension of OCBs is difficult if not impossible to distinguish from in-role job behaviors (cf. Motowidlo, Borman, & Schmit, 1997; Van Scotter & Motowidlo, 1996), as it includes those behaviors that are required by the job, but are performed with high levels of enthusiasm.

The numerous and changing definitions of OCBs and related constructs has led to debates over what should or should not count as an OCB. Our first goal in the present studies is to address this ongoing debate among

researchers interested in above-and-beyond behaviors by helping to highlight the connection between OCBs and social dilemmas.

### Social Dilemma Analysis of OCBs and NCBs

As noted earlier, we believe that many OCBs share important similarities with social dilemmas, in that OCBs often require short-term personal sacrifice in order to promote long-term collective interests. For example, an OCB may require an individual to exert costly effort (e.g., committee work) that can promote the long-term well-being of the organization (e.g., program accreditation). From this perspective, OCBs may be viewed as a particular type of social dilemma known as a social delayed fence (i.e., a situation in which a behavior with immediate costs for the self results in long-term benefits for the self and others).

Equally important are those negative behaviors that fall below routine expectations, behaviors we refer to as *noncompliance behaviors* (NCBs). While these behaviors may provide an employee with some personal benefit (e.g., talking with a friend on the phone), they can lead to long-term negative consequences for the organization (e.g., lowered customer satisfaction). To the extent that this reasoning is correct, the decision to engage in NCBs can be viewed as a type of social dilemma known as a social delayed trap (i.e., a situation in which a behavior with immediate benefits for the self results in long-term costs for the self and others).

In building a case for the argument that OCBs reflect a social dilemma, it is instructive to compare the factors that lead people to engage in OCBs with those that encourage cooperation in social dilemmas. For example, past research has indicated that willingness to engage in OCBs is more likely among individuals high in (job-related) morale, agreeableness, conscientiousness, positive affectivity, and sensitivity to rewards; as well as when groups are highly cohesive, role conflict and role ambiguity are low, and individuals are engaged in tasks that are low in routine, high in intrinsic interest, and on which feedback is provided (cf. Borman, Penner, Allen, & Motowidlo, 2001; Organ & Ryan, 1995; Podsakoff et al., 2000).

Similarly, cooperation in social dilemmas is more likely among individuals high in empathy (Batson & Moran, 1999), those with a prosocial value orientation (e.g., Kuhlman & Marshello, 1975; Parks, 1994; Roch & Samuelson, 1997; Van Lange & Kuhlman, 1994), and those concerned with the future consequences of their actions (e.g., Joireman, Lasane, Bennett, Richards, & Solaimani, 2001; Strathman, Gleicher, Boninger, & Edwards, 1994). Cooperation in social dilemmas is also enhanced when individuals feel a strong sense of social identification with the group (e.g., Brewer &

Kramer, 1986; De Cremer & Van Vugt, 1999; Van Vugt & De Cremer, 1999), and when their decisions can be identified (De Cremer, Snyder, & Dewitte, 2001).

On a related note (cf. Kerr, 1983; Kerr & Bruun, 1983), social loafing, in many ways the opposite of OCB, is reduced when an individual's contribution to a group can be identified and evaluated (i.e., feedback is provided), when an explicit performance standard exists (i.e., role conflict/ambiguity are low), when individuals are working on complex and interesting tasks (i.e., tasks with low routinization and high intrinsic satisfaction), and when individuals feel a closer sense of identification with their groups (i.e., group cohesion is high; Karau & Williams, 1993). In sum, it would appear, both on conceptual and empirical grounds, that OCBs share important similarities with social dilemmas. Based on this analysis, we hypothesize the following:

*Hypothesis 1a.* OCBs will be viewed as social delayed fences.

*Hypothesis 1b.* NCBs will be viewed as social delayed traps.

**Predicting OCBs: The Role of Empathy, Consideration of Future Consequences, and Employee Time Horizon.**

In addition to testing the preceding hypotheses, we seek to determine whether specific variables relevant to decision making in social dilemmas will predict people's tendency to engage in OCBs. Accordingly, we examine two person variables (i.e., empathy and consideration of future consequences [CFC]) and one situational variable (i.e., employee time horizon) that have been shown to predict behavior in social dilemmas.

We assess individual differences in empathy (i.e., perspective taking and empathic concern; Davis, 1983) because empathy has been linked with a variety of outcomes that are theoretically related to OCBs (and NCBs), including higher levels of cooperation in social dilemmas (Batson & Moran, 1999), higher levels of prosocial behavior (Eisenberg & Miller, 1987), better functioning in interpersonal relationships (Davis & Oathout, 1987, 1992; Franzoi, Davis, & Young, 1985), and lower levels of aggression (Miller & Eisenberg, 1988). Consistent with this past work, we hypothesize the following:

*Hypothesis 2a.* Individuals reporting higher levels of (dispositional) empathy will be more likely to engage in OCBs.

*Hypothesis 2b.* Individuals reporting higher levels of (dispositional) empathy will be less likely to engage in NCBs.

We also assess individual differences in the consideration of future consequences; that is, the importance individuals assign to immediate versus

delayed consequences of their behavior (Strathman et al., 1994). We use the CFC construct in light of its overlap with conscientiousness, and because CFC has been shown to predict outcomes that are theoretically related to OCBs; namely, higher levels of cooperation in a variety of real-world social dilemmas (e.g., Joireman et al., 2001; Lindsay & Strathman, 1997; Strathman et al., 1994). We hypothesize the following:

*Hypothesis 3a.* Relative to those low in CFC, individuals high in CFC will be more likely to engage in OCBs.

*Hypothesis 3b.* Relative to those low in CFC, individuals high in CFC will be less likely to engage in NCBs.

Finally, we examine how employees' anticipated time horizon within an organization will influence their likelihood of engaging in OCBs (and NCBs). Past studies have demonstrated that people who are encouraged to adopt a long-term time horizon, as opposed to a short-term time horizon (e.g., via low interfirm mobility), achieve better joint outcomes in integrative negotiations (Mannix, Tinsley, & Bazerman, 1995) and are less likely to deplete commonly held organizational resources (Mannix, 1991; Mannix & Loewenstein, 1993). Presumably, this is because of the fact that many of the benefits associated with prosocial behaviors like these are delayed. Assuming that many of the benefits associated with OCBs also are delayed, we hypothesize the following:

*Hypothesis 4a.* OCBs will be higher among those encouraged to adopt a long-term time horizon in their organizations.

*Hypothesis 4b.* By contrast, we expect that NCBs will be less likely when individuals adopt a long-term, as opposed to a short-term, time horizon.

While the main effect of time horizon is important, of greater interest is the possibility that employees' time horizon within an organization will interact with their level of empathy and concern with future consequences to predict their willingness to engage in OCBs. As an example, consider an employee who is high in empathy. This individual may engage in OCBs, despite the fact that she is about to leave the organization, because leaving (or staying) is irrelevant to her motive to help others for the sake of helping them. By contrast, an individual low in empathy may engage in OCBs for different (primarily self-interested) reasons, and thus may base his decision to engage in OCBs on whether he plans to stay or leave. If true, empathy should be a stronger predictor of OCBs when individuals are planning to leave an organization, a line of reasoning that is consistent with Batson's

(cf. Batson, Duncan, Ackerman, Buckley, & Birch, 1981) classic work on the empathy–altruism hypothesis.

As another example, consider an employee who is concerned with the future consequences of his actions. This individual may be more likely than those low in CFC to engage in OCBs when he sees a future for himself within an organization. But what if this employee has landed another job and intends to leave soon? Under these circumstances, OCBs would seem to lose some of their appeal. If true, individuals high in CFC should be especially likely to engage in OCBs when they see a future in the organization, and may be less likely to engage in such actions when they see no future in an organization; a line of reasoning that is consistent with several recent studies employing the CFC construct (e.g., Joireman, Anderson, & Strathman, 2003).

Based on the preceding reasoning, we hypothesize the following:

*Hypothesis 5a.* Empathy will be related more strongly to OCBs when employees adopt a short-term time horizon.

*Hypothesis 5b.* Empathy will be related more strongly to NCBs when employees adopt a short-term horizon.

We also propose the following hypotheses:

*Hypothesis 6a.* CFC will be related more strongly to OCBs when employees adopt a long-term time horizon.

*Hypothesis 6b.* CFC will be more strongly related to NCBs when employees adopt a long-term horizon.

#### Study 1: A Social Dilemma Analysis of OCBs Assessed Via an In-Basket Exercise

Study 1 provides an initial test of Hypothesis 1a that OCBs reflect social delayed fences, and Hypothesis 1b that NCBs reflect social delayed traps. We tested these hypotheses within the context of a novel in-basket exercise designed to assess OCBs (cf. Daniels, Joireman, & Kamdar, 2004; Hopper & Mitchell, 1995; Trevino & Youngblood, 1990).

The in-basket exercise presents participants with nine “memos” requiring action. Each memo provides three possible response options originally written to reflect a noncompliance behavior (NCB; a behavior that falls below routine expectations), a compliance behavior (CB; a behavior that meets routine expectations), or an organizational citizenship behavior (OCB; a behavior that exceeds routine expectations), respectively. Based on

Hypothesis 1a, we expect that OCB options will be viewed as costly to the employee in the short run, but beneficial to the organization in the long run. According to Hypothesis 1b, however, the NCB options will be viewed as beneficial to the employee in the short run, but costly to the organization in the long run. CBs are expected to fall in the middle of these extremes.

Because the in-basket task represents a less traditional measure of OCBs, another important goal of Study 1 is to determine whether the in-basket task can be treated as a valid measure of OCBs (vs. CBs and NCBs). To accomplish this, we also assess whether the in-basket options are perceived as originally intended (i.e., the OCB as exceeding expectations, the CB as meeting expectations, and the NCB as falling below expectations).

### *Method*

#### *Participants*

Two separate groups of participants were recruited to evaluate, respectively, (a) whether the three in-basket options (OCB, CB, and NCB) are perceived as exceeding, meeting, or falling short of expectations, respectively (role expectations sample); and (b) whether the OCB option is perceived as a social delayed fence and the NCB is perceived as a social delayed trap (perceived cost/benefit sample). The role expectations sample consists of 31 Introductory Psychology students (18 men, 13 women) who participated in exchange for course credit. The perceived benefits sample consists of 54 business students (23 men, 31 women) who participated in exchange for extra credit. Participants in both studies received a written debriefing at the end of their respective studies.

#### *Simulated In-Basket Exercise: Basic Paradigm*

Both groups of participants were informed that they would be looking at a stack of items in an employee's in-box (cf. Daniels et al., 2004; Hopper & Mitchell, 1995; Trevino & Youngblood, 1990). Participants read six memos, two formal letters, and a company newsletter each addressed to "Pat Sneed," the National Sales Director for "Micrometer Electronics Corporation," a manufacturer of electronic parts. To highlight the costly nature of these decisions, participants learned that Pat was experiencing a "hectic month," and that Pat had only 1 day to deal with each in-box item before he/she left on another 10-day business trip. The nine scenarios appeared in a single packet and were arranged in a single random order.

Each in-basket item explained that Pat could take one of three different courses of action in response to the in-box item. These actions were initially written so that one option would represent an OCB (i.e., a behavior that would exceed routine expectations), another would represent a CB (i.e., a behavior that would meet routine expectations), and another would represent an NCB (i.e., a behavior that would fall short of routine expectations). Within any given scenario (letter, memo, etc.), the three behavioral options (OCB, CB, or NCB) were presented in a randomly arranged order.

### *Role Expectation and Perceived Benefit Ratings*

We assessed participants' perceptions of the in-basket options as being in-role versus extra-role by asking participants in the role expectations sample to rate on a 7-point scale the extent to which each in-basket option "falls below, meets, or exceeds what Micrometer would expect from Pat," given the time constraints that Pat faced on Monday. The scale ranged from 1 (*far below expectations*) to 4 (*meets expectations*) to 7 (*far above expectations*). To evaluate whether the in-basket task reflects a social dilemma, participants in the perceived cost/benefit sample rated on a 7-point scale ranging from 1 (*very costly*) to 7 (*very beneficial*) how costly or beneficial each in-basket option would be for: (a) Pat in the short term; (b) Pat in the long term; (c) the organization in the short term; and (d) the organization in the long term.

## *Results*

### *Role Expectations*

We first analyzed participants' ratings concerning the extent to which the three in-basket options exceeded, met, or fell below expectations. Prior to analysis, we computed a mean rating for each option (OCB, CB, NCB) by averaging responses to these options over the nine in-basket items. A repeated-measures ANOVA on the three averaged ratings reveals a significant effect for the in-basket option,  $F(2, 28) = 149.19, p < .001$ .

In line with our expectations, the OCB mean ( $M = 5.08, SD = 0.74$ ) fell significantly above the scale midpoint of 4 (i.e., the action meets expectations) based on a single-sample  $t$  test,  $t(29) = 8.01, p < .001$ . The CB mean ( $M = 3.93, SD = 0.40$ ) did not differ significantly from the midpoint of 4,  $t(29) = -0.96, ns$ . Finally, the NCB mean ( $M = 2.14, SD = 0.64$ ) fell significantly below the midpoint of 4,  $t(29) = -15.86, p < .001$ . These results indicate that OCBs were viewed as exceeding expectations, CBs as meeting



expectations, and NCBs as falling short of expectations. These results suggest that the OCB option in the current in-basket exercise is perceived in a manner consistent with the definition of an OCB (i.e., as a behavior that goes above and beyond one's formally defined job expectations), the CB option represents what typically would be expected as a part of an employee's role, and the NCB option represents an action that falls below expectations.

*Social Dilemma Analysis of the In-Basket Options*

We next analyzed participants' ratings of the short-term and long-term costs/benefits associated with each of the three in-basket options. Prior to analysis, we averaged the 12 types of ratings (4 Cost/Benefit Ratings: employee short-term, employee long-term, organization short-term, organization long-term  $\times$  3 In-Basket Options: OCB, CB, or NCB). To aid in interpreting the results, we display the relevant means (along with their 95% confidence intervals [CIs]) in Figure 1.

We begin by considering the four cost/benefit ratings associated with the OCB option, as shown in the left third of Figure 1. To qualify as a social delayed fence, the OCB option should meet three criteria: (a) OCBs should involve short-term costs to the employee (i.e., values below the scale midpoint of 4); (b) OCBs should involve long-term benefits to the organization (i.e., values above the scale midpoint of 4); and (c) the long-term benefits to

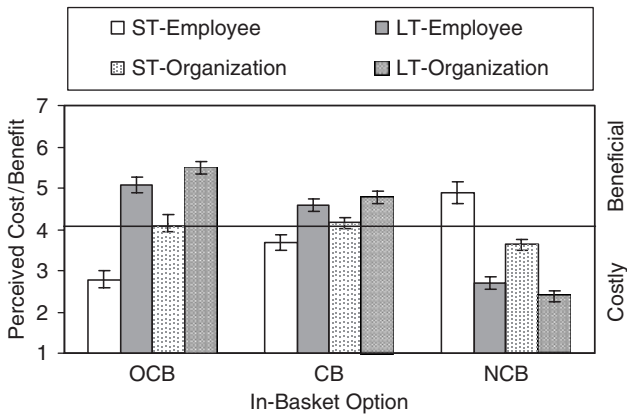


Figure 1. Mean perceived short-term and long-term benefits of organizational citizenship behavior (OCB), compliance behavior (CB), and noncompliance behavior (NCB) and to employee and organization, with corresponding 95% confidence intervals (Study 1).

the organization should exceed the long-term benefits to the employee. If this condition is not met, OCBs might best be treated as an individual delayed fence in which an employee must choose between minimizing short-term costs to the self and maximizing long-term benefits to the self.<sup>3</sup>

As can be seen in Figure 1, ratings of OCBs support all three of the necessary criteria. OCBs were perceived to be significantly costly to the employee in the short run (i.e., the mean short-term rating for the employee was significantly below the scale midpoint of 4, as indicated by the mean's 95% CI) and significantly beneficial to the organization in the long run (i.e., the mean long-term rating for the organization was significantly above the scale midpoint of 4). In addition, the mean long-term benefit of OCBs for the organization (LTO) exceeded the long-term benefit for the employee (LTE).

Complementing these key comparisons, it is interesting to note several additional differences between the means that speak to the question of whether OCBs reflect a social dilemma. For example, the short-term benefits associated with OCBs are significantly higher for the organization than for the employee (STO > STE). And, as we just noted, the long-term benefits associated with OCBs are significantly greater than the long-term benefits to the employee (LTO > LTE). These patterns are consistent with the claim that OCBs reflect a social dilemma involving a conflict between individual and collective interest.

It is also important to consider the difference between the short-term and long-term outcomes associated with OCBs. An examination of the means indicates that there is a clear conflict between the short-term and long-term consequences of OCBs for an employee, with OCBs producing significantly greater benefits to the employee in the long term than the short term (LTE > STE). A similar pattern emerges when outcomes to the organization are examined: OCBs yield significantly higher outcomes in the long term than in the short term for the organization (LTO > STO). Thus, in both cases, it is clear that the benefits associated with OCBs are much greater in the long term than in the short term.

Taken as a set, these social and temporal comparisons provide additional support for the claim that OCBs reflect a social dilemma (i.e., the benefit to the organization outweighs the benefit to the employee), and that this dilemma involves a temporal dimension (long-term outcomes outweigh short-term outcomes). A similar, but somewhat weaker, pattern is evident among the CB means, suggesting that CBs, though expected as part of one's job, are viewed as a social dilemma involving a temporal dimension; but the social

<sup>3</sup>We thank Mark Van Vugt for bringing this possibility to our attention at the 9th International Conference on Social Dilemmas in Chicago, July 2001.

and temporal conflicts associated with CBs are less intense than they are for OCBs. We now turn to the pattern of means associated with NCBs.

As expected, ratings of NCBs reveal exactly the opposite pattern: NCBs were perceived to be significantly beneficial to the employee in the short run, significantly costly to the organization in the long run, and the long-term costs of NCBs to the organization were more severe (as indicated by a lower mean) than the long-term costs to the employee, indicating that NCBs were perceived as social delayed traps. Additional comparisons, similar to those just outlined, provide additional support for the argument that NCBs are viewed as a social delayed trap. For example, the outcomes associated with NCBs are clearly higher for the employee as compared to the organization ( $STE > STO$ ;  $LTE > LTO$ ), supporting the claim that NCBs reflect a social dilemma involving a conflict between employee and organizational interests. It is also clear from the NCB means that this social dilemma contains a temporal dimension, with the short-term outcomes for the employee and organization clearly exceeding the long-term outcomes for the employee and organization ( $STE > LTE$ ;  $STO > LTO$ ). Taken together, this pattern clearly supports the claim that NCBs also reflect a social dilemma with a temporal dimension; but in this case, the conflict is between short-term employee gains and long-term costs to the organization.

### *Discussion*

The purpose of our first study was to test the hypothesis that the decision to engage in OCBs—versus CBs or NCBs—can be viewed as a social dilemma in which short-term individual interests are at odds with long-term collective interests. We evaluated this hypothesis within the context of an in-basket exercise originally designed to assess OCBs (vs. CBs and NCBs).

Because the in-basket task represents a less common measure of OCBs, we first sought to evaluate its validity as a measure of OCBs. Our role expectation results reveal that the in-basket options were perceived as intended (i.e., the OCB as an above-and-beyond behavior; the CB as an in-role behavior; and the NCB as a behavior that falls below expectations), suggesting that the in-basket task can be treated as a valid measure of OCBs.

Our cost/benefit results further support the hypothesis that OCBs would be perceived as social delayed fences (Hypothesis 1a), whereas NCBs would be perceived as social delayed traps (Hypothesis 1b). In sum, the results from Study 1 clearly support our underlying assumptions that form the basis for our remaining hypotheses: OCBs and NCBs reflect social dilemmas involving a social conflict and a temporal conflict. As such, social and temporal concerns should predict willingness to engage in OCBs and NCBs.

In Study 2, we evaluate several predictions concerning the determinants of OCBs and NCBs, based on our social-dilemma analysis.

Study 2: In-Basket Preferences as a Function of Empathy, CFC,  
and Employee Time Horizon

*Method*

*Participants and Procedure*

Participants were 109 Master of Business Administration (MBA) students (69 men, 40 women) from a large state university who participated in exchange for extra credit. Participants were debriefed at the end of the study. The study was run in two phases (personality assessment followed a week later by the in-basket task) in an effort to reduce the likelihood that completing the personality measures would serve simply to activate or make accessible the personality construct that would, in turn, influence participants' subsequent in-basket judgments (cf. Feldman & Lynch, 1988; Sandelands & Larson, 1985).

*Individual-Difference Measures*

During Phase 1, participants completed several individual-difference measures, including Davis' (1983) Interpersonal Reactivity Index (IRI; a measure of empathy) and Strathman et al.'s (1994) Consideration of Future Consequences scale. To control for order effects, presentation of the measures was counterbalanced.

Davis' (1983) IRI contains four subscales, two of which were particularly relevant to the present study, including empathic concern and perspective taking.<sup>4</sup> Each scale contains seven items that participants rate on a 5-point scale ranging from 1 (*never describes me*) to 5 (*always describes me*). A sample empathic concern item reads "I often have tender, concerned feelings for people less fortunate than me"; and a sample perspective-taking item reads "I try to look at everybody's side of a disagreement before I make a decision." To simplify our analyses, we combined the empathic concern and perspective-taking subscales to create a single empathy scale (current study,  $\alpha = .84$ ).

<sup>4</sup>The two remaining IRI subscales assess tendencies to identify with fictional characters (fantasy) and to become anxious in emergency situations (personal distress). While, as a matter of course, we did assess personal distress, it did not constitute a construct of interest in our studies.

Strathman et al.'s (1994) CFC scale contains 12 general statements reflecting an individual's tendency to consider the future consequences of his or her behavior that participants rate on a 7-point scale ranging from 1 (*extremely uncharacteristic*) to 7 (*extremely characteristic*). A sample item reads "I consider how things might be in the future, and try to influence those things with my day-to-day behavior." The CFC scale demonstrated acceptable reliability in this study ( $\alpha = .78$ ).

### *In-Basket Exercise*

One week after completing the individual-difference measures, participants completed the in-basket exercise described in Study 1. However, instead of rating the costs/benefits of each option, participants rated the likelihood that they would engage in each of the three options in a given scenario on a 7-point scale ranging from 1 (*not at all likely*) to 7 (*extremely likely*). Participants then selected the one option they would be most likely to choose for each scenario. In an attempt to minimize demand characteristics, participants were asked to enter this preferred option into a daily schedule to reinforce the fact that consistently choosing the OCB in each scenario would require them to work late.

The scenarios were presented in one of two orders. The first order was determined randomly, while the second order was the reverse of the first.

### *Time Horizon Manipulation*

Before completing the in-basket exercise, participants were randomly assigned to one of two time horizon conditions. In the short-term time horizon condition, participants were told that while they liked their job, as a result of some family issues, they had accepted another job and would be moving in 3 months. In the long-term time horizon condition, participants received no information about leaving (or staying with) the company.<sup>5</sup>

<sup>5</sup>To check the effect of our time horizon manipulation, we asked 31 business and psychology students to rate how costly or beneficial each in-basket option would be for the following: (a) Pat in the short term; (b) Pat in the long term; (c) the organization in the short term; and (d) the organization in the long term. These ratings were made on a 7-point scale ranging from 1 (*very costly*) to 7 (*very beneficial*). Prior to making their ratings, participants were assigned randomly to one of two time horizon conditions. All participants were told that they liked their jobs, and that they had good career potential in the organization. Participants in the short-term time horizon condition were further told that, as a result of some "family issues," they were planning to leave the organization at the end of 3 months. Participants in the long-term time horizon condition were given no additional details concerning how long they would stay with the organization. As expected, participants in the long-term condition believed that OCBs ( $M = 5.06$ ,  $SD = 0.78$ ) and CBs ( $M = 4.76$ ,  $SD = 0.56$ ) would be more beneficial to Pat in the

## *Results*

### *Data Analysis Strategy*

We analyzed the three in-basket ratings and the in-basket choice score using a series of four-step hierarchical multiple regressions. In Step 1, we entered empathy, CFC, and time horizon. In Step 2, we entered the interactions between time horizon and each personality variable (empathy and CFC). Significant interactions between time horizon and a given personality variable were followed up by (a) examining the simple relationship between the personality variable and the criterion variable within each time horizon condition; and (b) examining the effect of time horizon on the criterion variable at low ( $-1 SD$ ) and high ( $+1 SD$ ) levels of the relevant personality variable, following procedures outlined by Judd and McClelland (1989). In Steps 3 and 4, we entered the two-way interaction between empathy and CFC; and the three-way interaction between empathy, CFC, and time horizon, respectively. Because the last two interactions failed to reach significance in every analysis reported later, we do not discuss them in any detail.

### *OCB Likelihood Ratings*

Two noteworthy effects emerged in our analysis of the OCB likelihood ratings. First, likelihood of engaging in OCBs was higher in the long-term ( $M = 4.50$ ,  $SD = 0.74$ ) than in the short-term condition ( $M = 4.23$ ,  $SD = 0.82$ ), but this effect was only marginally significant ( $\beta = .17$ ),  $t(101) = 1.70$ ,  $p = .09$ . Second, the results reveal a significant two-way interaction between CFC and time horizon ( $\beta = .21$ ),  $t(100) = 2.03$ ,  $p < .05$ . As can be seen in Figure 2, the pattern of this interaction was consistent with Hypothesis 6a.

To examine this interaction further, we conducted two sets of follow-up analyses, as outlined earlier. The first set of follow-up analyses reveals a positive but insignificant relationship between CFC and likelihood of engaging in OCBs in the long-term condition ( $\beta = .10$ ),  $t(100) = 0.74$ ,  $p = .46$ ; and, interestingly, a significant negative relationship between CFC and likelihood of engaging in OCBs in the short-term condition ( $\beta = -.32$ ),  $t(100) = -2.04$ ,  $p < .05$ .

long run than did participants in the short-term condition ( $M_s = 4.37$  and  $4.21$ , respectively;  $SD_s = 0.77$  and  $0.44$ , respectively),  $t_s(28) = 2.45$  and  $2.99$ ,  $p_s = .03$  and  $.006$ , respectively. Participants in the long-term condition also believed that NCBs would be more costly to Pat in the long run ( $M = 2.99$ ,  $SD = 0.70$ ) than did participants in the short-term condition ( $M = 3.61$ ,  $SD = 0.79$ ),  $t(28) = 2.28$ ,  $p < .05$ . Taken as a set, these results suggest that participants were sensitive to our time-horizon manipulation.

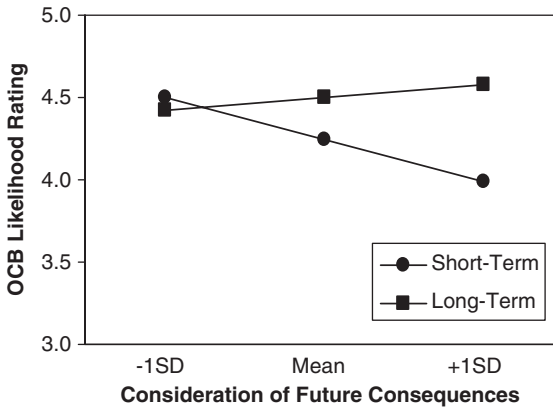


Figure 2. Organizational citizenship behavior (OCB) likelihood as a function of consideration of future consequences and time horizon (Study 2).

The second set of follow-up analyses evaluates the impact of time horizon at high (+ 1 *SD*) and low (- 1 *SD*) levels of CFC. These analyses reveal that the long-term condition led to significantly higher OCB likelihood ratings than did the short-term condition when CFC was high ( $\beta = .38$ ),  $t(100) = 2.66$ ,  $p < .01$ ; whereas there was no significant difference between the long-term and short-term conditions when CFC was low ( $\beta = -.05$ ),  $t(100) = -0.33$ , *ns*. In sum, these results provide reasonable support for Hypothesis 6a.

#### *NCB Likelihood*

Because we observed no main or interactive effects in our analysis of CB ratings, we proceed directly to a discussion of NCB ratings. Lower NCB ratings were predicted by higher levels of empathy ( $\beta = -.20$ ),  $t(101) = -1.96$ ,  $p = .06$ ; and higher levels of CFC ( $\beta = -.17$ ),  $t(101) = -1.70$ ,  $p = .10$ , though both relationships were only marginally significant. No other effects were significant.

#### *In-Basket Choice Scores*

Analysis of the in-basket choice scores reveals two main effects and a two-way interaction. In line with Hypothesis 2a, in-basket choice scores were associated with higher levels of empathy ( $\beta = .25$ ),  $t(80) = 2.18$ ,  $p < .05$ . In line with Hypothesis 4a, in-basket choice scores were also higher

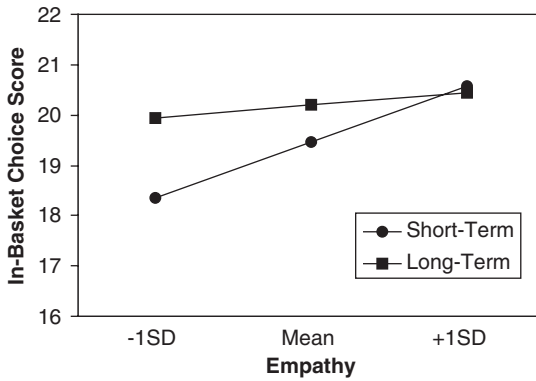


Figure 3. In-basket choice scores as a function of empathy and time horizon (Study 2).

in the long-term condition ( $M = 20.19$ ,  $SD = 1.68$ ) than in the short-term condition ( $M = 19.44$ ,  $SD = 1.89$ ), although this effect was only marginally significant ( $\beta = .20$ ,  $t(80) = 1.92$ ,  $p < .06$ ). However, these main effects are qualified by a marginally significant interaction between empathy and time horizon ( $\beta = -.24$ ,  $t(78) = -1.73$ ,  $p < .10$ ). As can be seen in Figure 3, the pattern of this interaction is consistent with Hypothesis 5a.

To examine this interaction further, we conducted two sets of follow-up analyses, as outlined earlier. The first set of follow-up analyses reveals a significant positive relationship between empathy and the in-basket choice score within the short-term condition ( $\beta = .62$ ,  $t(78) = 2.54$ ,  $p < .05$ ); but not within the long-term condition ( $\beta = .14$ ,  $t(78) = 1.09$ , *ns*). The second set of follow-up analyses reveals that the long-term condition led to significantly higher in-basket choice scores than did the short-term condition when empathy was low ( $-1 SD$ ;  $\beta = .44$ ,  $t(78) = 2.55$ ,  $p < .05$ ); but not when empathy was high ( $+1 SD$ ;  $\beta = -.04$ ,  $t(78) = -0.20$ , *ns*). In sum, the present results provide reasonable support for Hypothesis 5a.

### Discussion

The primary purpose of the present study was to examine how individual differences in empathy and CFC would interact with an employee's time horizon within an organization to predict preferences in the in-basket exercise. Two interesting findings emerged. First, higher levels of CFC were associated with significantly lower OCB likelihood ratings in the short-term condition, whereas CFC showed no significant relationship with OCB likelihood ratings in the long-term condition.



While the nature of this interaction is not exactly as we had predicted, it makes some sense that an individual who is concerned with the future consequences of his or her actions should not be especially motivated to exert effort (engaging in OCBs) when that individual has reason to believe that there will be no serious negative consequences associated with such behavior. We return to this finding in the General Discussion, where we highlight its overlap with similar (nonintuitive) interactions involving the CFC construct.

A second interesting finding is the fact that empathy showed a strong positive relationship with the in-basket choice score in the short-term condition, but no significant relationship with the in-basket choice score in the long-term condition. We return to this interesting pattern in the General Discussion, where we highlight how it overlaps with Batson's work on the empathy–altruism hypothesis, which has shown that empathy tends to be a better predictor of helping behavior when it is easy (rather than difficult) to escape the helping situation (in our case, when an employee anticipates leaving an organization in the near future). Taken together, these findings, combined with our earlier findings from Study 1, provide reasonable support for a social dilemma analysis of OCBs (and NCBs).

### General Discussion

We have argued that OCBs represent a type of social dilemma known as a *social delayed fence* in which short-term sacrifice by an employee leads to long-term benefits for the employee and his or her organization. Building on this analysis, we proposed six hypotheses concerning the determinants of OCBs. On the whole, the results were consistent with our hypotheses.

The cost/benefit ratings from Study 1 supported the prediction that OCBs, as reflected in our in-basket measure, would be seen as social delayed fences (Hypothesis 1a). The results also show that participants believed the OCB option in the in-basket task was an extra-role behavior, lending support to the argument that the in-basket task can be used as a novel means of assessing OCB in a scenario methodology.

Study 2 revealed support for the hypotheses that OCBs should be more likely among individuals high in empathy (Hypothesis 2a) and CFC (Hypothesis 3a), and those who believe they will be with a company for the foreseeable future (vs. about to leave an organization). The results also support the hypothesis that empathy would show its strongest relationship with OCBs in the short-term time horizon condition (Hypothesis 5a) and that those high in CFC would be more likely than those low in CFC to engage in OCBs, primarily when they believe they will be with an

organization for the foreseeable future (Hypothesis 6a). Interestingly, CFC showed a negative relationship with OCBs in the short-term time horizon condition.

Complementing our focus on OCBs, we also tested the hypothesis that *noncompliance behaviors*, or behaviors that fail to meet routine expectations, represent a type of social dilemma known as a *social delayed trap* in which behaviors that are appealing to an employee in the short run lead to long-term costs for the employee and his or her organization (Hypothesis 1b). The results support this hypothesis and also provide some support for the predictions that NCBs should be less likely among those high in empathy (Hypothesis 2b) and those high in CFC (Hypothesis 3b).

The results do not support the predictions that NCBs would be more likely in the short-term time horizon condition (Hypothesis 4b) or that time horizon would interact with individual differences in empathy and CFC to predict NCBs (Hypotheses 5b and 6b). As a set, the current findings offer several theoretical and practical implications.

#### *Contribution to Work on OCBs and Applied Social Dilemmas*

The present studies make several contributions to research on OCB. To begin, while various researchers (Borman & Motowidlo, 1993; Motowidlo et al., 1997; Organ, 1988; Organ & Ryan, 1995) have argued that personality should be a stronger predictor of OCB, relative to contextual variables, results to date have not supported this prediction (e.g., Fecteau, Allen, Fecteau, Bordas, & Tears, 2000; McManus & Kelly, 1999; Organ & Ryan, 1995; Podsakoff et al., 2000). Organ and Ryan suggested that dispositional variables do not predict OCB directly, but rather in interaction with other variables. Our results support this interactionist approach, as time horizon interacted with both empathy and CFC in predicting OCBs.

Second, our studies address a limitation noted by Podsakoff et al. (2000) and others (cf. Van Dyne, Cummings, & Parks, 1995) that research on OCBs and related constructs have devoted sparse attention to the underlying nature of these constructs. Viewing OCBs as social dilemmas could potentially eliminate some of the definitional confusion, as well as the proliferation of surrogate constructs that has developed around OCBs during the past decade. Understanding NCBs as social delayed traps also could contribute to the rapidly growing research on maladaptive behaviors in organizations (e.g., violence, sabotage, absenteeism).

The present studies make at least two contributions to research on applied social dilemmas. A standard approach in such studies is to assume that

a given real-world problem represents a social dilemma, and to subsequently forward social-dilemma-based predictions without evaluating whether the decision in question has an underlying structure similar to a social dilemma. While many studies using this approach have yielded results consistent with a social dilemma analysis of their respective problems, it stands to reason that if decision makers do not perceive a real-world problem as a social dilemma, a social dilemma analysis of that problem is likely to be less useful (cf. Plous, 1993). This suggests that researchers might wish to consider first assessing whether the decision in question represents a social dilemma before testing specific social-dilemma-based predictions, as illustrated in our first study.

The present studies also help to highlight the relevance of social dilemmas within an applied domain that has received little attention within the field of social dilemmas. While productivity in groups has long been approached from a social dilemma perspective (e.g., Kerr, 1983; Kerr & Bruun, 1983), social dilemma researchers have not devoted much attention to the specific domain of OCBs (cf. Cropanzano & Byrne, 2000). Our results suggest that the OCB domain is a potentially rich testing ground for insights gained from past research on social dilemmas. Further work in this area is likely to add weight to the growing number of studies highlighting the relevance of social dilemmas within other applied domains, such as commuting decisions (e.g., Van Vugt, Meertens, & Van Lange, 1995) and the environment (e.g., Joireman et al., 2001).

#### *Contribution to Work on Empathy and Prosocial Behavior*

The present results also address the longstanding debate over whether all prosocial behavior is guided by selfish motives, or whether at least some prosocial behavior may be guided by altruistic concerns (cf. Bolino, 1999). In one classic study on this question, Batson et al. (1981) led participants to experience high or low levels of empathy, and then offered them an opportunity to help another individual under conditions in which it was either easy or difficult to escape the helping environment. Consistent with the empathy–altruism hypothesis, Batson et al. found that empathic individuals helped, regardless of how easy or difficult it was to escape; whereas individuals low in empathy only helped when it was hard to escape.

In a similar fashion, we found that individuals high in dispositional empathy were willing to engage in OCBs, regardless of whether they planned to leave (easy escape) or remain within (hard escape) an organization; whereas individuals low in empathy would engage in OCBs only when they expected to stay in an organization for the foreseeable future (Hypothesis 5a). As

such, our results provide a conceptual replication of Batson et al.'s (1981) earlier findings.

This is an interesting finding, as Batson (1991) argued that situationally induced empathy and dispositional empathy are not identical constructs, that dispositional empathy is likely to have a weaker impact than situationally induced empathy, and that previous tests of the empathy–altruism hypothesis using dispositional empathy have not tended to support the hypothesis (e.g., Batson, Bolen, Cross, & Neuringer-Benefiel, 1986). In light of these arguments, the current results, based on dispositional empathy, would seem even more impressive. That said, it is important to recall that the interaction between empathy and time horizon was only marginally significant.

Moreover, while the pattern of the Empathy  $\times$  Time Horizon interaction is consistent with the empathy–altruism hypothesis, we have no direct evidence addressing exactly why individuals high in empathy engage in OCBs, even when it is easy to escape. Thus, the current findings should be interpreted as preliminary, rather than as definitive support for our hypothesis. It is worth noting, however, that we found a significant Empathy  $\times$  Time Horizon interaction of the same form in several follow-up studies employing more traditional forms of OCBs, suggesting that the current interaction between empathy and time horizon is a reliable finding.

#### *Contribution to Work on Individual Differences in the Consideration of Future Consequences*

The current results also help to advance work on individual differences in CFC. A close inspection of these studies reveals that the main effect of CFC is not always strong, and that a clearer picture often emerges when researchers examine the interaction between CFC and the perceived consequences of an individual's actions. In general, when such interactions have been examined, individuals high in CFC exhibit better behavior only when they believe (or are led to believe) that there are future consequences attached to their actions (e.g., Joireman et al., 2003; Strathman et al., 1994). This suggests that future-oriented employees (i.e., those high in CFC) may be very good employees if they believe that they have a future within an organization, but may be less productive when they believe that they are on their way out the door, as these employees would likely see few future consequences associated with their reduced level of OCBs. In fact, our results are consistent with this pattern, insofar as high levels of CFC were found to predict lower levels of OCBs when participants imagined that they

would soon be leaving an organization, a pattern that we have replicated more recently using more traditional OCB scales.

At first glance, this pattern may seem somewhat counterintuitive, but it is consistent with the logic underlying the CFC construct, as well as past research employing the CFC scale. Theoretically speaking, individuals low in CFC place a high degree of importance on immediate consequences, and little importance on delayed consequences. By contrast, individuals high in CFC place a high degree of importance on delayed consequences, and relatively little importance on immediate consequences (Strathman et al., 1994).

This reasoning is, in fact, supported by several studies that have used the CFC scale. For example, in one recent study, Joireman et al. (2003) examined how CFC and anticipated interaction with an aggressive experimenter would interact to predict aggression toward (i.e., negative evaluations of) the experimenter. When no additional interaction with the experimenter was expected, low and high CFCs displayed equally high levels of aggression. When participants expected to interact with the authority figure 2 months after completing their evaluation of the experimenter, high CFCs displayed less aggression than did low CFCs. And when participants expected to interact with the authority figure immediately after completing the evaluation of the experimenter, low CFCs displayed less aggression than did high CFCs (i.e., when there were only immediate consequences, high CFCs were more aggressive than were low CFCs). In sum, the current results provide additional support for the counterintuitive finding that individuals high in CFC are not always more likely than those low in CFC to engage in more conscientious/agreeable behavior.

### *Practical Applications*

On a broader note, the present results suggest that researchers and practitioners who wish to encourage OCBs should pay attention to at least two different dimensions: the social dimension (awareness and concern with the social consequences of OCBs), and the temporal dimension (awareness and concern of the delayed consequences of OCBs). This could be accomplished through the hiring process (e.g., hiring people high in empathy and those high in CFC), or through interventions aimed at enhancing trust (and, therefore, cooperation) and emphasizing the importance of delayed consequences.

Alternatively, interventions might be tailored to individuals by highlighting the consequences (personal–social; immediate–delayed) that individuals find particularly persuasive. Based on the present results, we believe that a social dilemma analysis could offer a useful framework within which

to develop effective interventions aimed at encouraging employees to advance the long-term interests of their organizations.

### *Strengths, Limitations, and Future Directions*

While we believe that the present studies offer several new insights, they should be interpreted within the context of two limitations. First, participants provided their views on what they would most likely do under certain circumstances. While this methodology has certain advantages—such as the inclusion of experimental manipulations (Cropanzano, Aguinis, Schminke, & Dehnam, 1999; Weiner, 2000) and the reduction of noise through the use of a standardized setting across participants (Murphy, Herr, Lockhart, & Maguire, 1986)—future research should build on these results by examining whether similar patterns emerge in the analysis of actual behavior.

A second concern that might be raised is our use of a relatively novel in-basket measure designed to assess OCBs (vs. CBs and NCBs). To address this concern, we evaluated whether participants viewed the in-basket options in a manner consistent with their original conception as behaviors that exceed expectations for a typical employee. The results reveal that participants viewed the OCB option as exceeding expectations, the CB option as meeting expectations, and the NCB option as falling below expectations, which gives us increased confidence that the in-basket task used here can be used as a valid measure of the tendency to engage in OCBs (vs. CBs and NCBs). Nevertheless, additional work employing more traditional measures of OCBs clearly would be beneficial in determining the generalizability of these results.

Despite the preceding caveats, the present studies have several strengths as well. First, the present studies integrate two important lines of research, highlighting both their theoretical and empirical overlap. Second, the present studies advance work on individual differences in empathy and CFC, and demonstrate how such constructs interact with an employee's time horizon to predict OCBs. Finally, the present studies illustrate a two-stage approach to the analysis of real-world problems assumed to have an underlying structure similar to a social dilemma, including the direct assessment of the short-term and long-term costs and benefits of the various options for the relevant actors, and subsequent testing of social-dilemma-based predictions concerning the behavior in question. Future efforts to pursue similar social-dilemma analyses within other real-world domains could yield significant long-term benefits for the relevant groups involved.

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