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Abstract

Across three laboratory studies, this paper illustrates how a common strategic decision aimed at increasing one's own power—investing in outside options—can lead to opportunistic behavior in exchange relationships. We show that the extent to which individuals have invested in creating outside options increases the likelihood that they will exploit their current exchange partners, even after controlling for the leverage provided by the outside options. Our results demonstrate that having previously sunk investments in an outside option leads to a heightened sense of entitlement, even when the outside option has been foregone. In turn, feelings of entitlement result in higher aspirations for what is to be gained in the current relationship, and these aspirations fuel opportunism. Finally, we show that other parties may fail to anticipate these effects, leaving them vulnerable to exploitation.

Keywords: power, opportunism, outside options, sunk costs, negotiation

In group and organizational settings, power shapes the nature of social and strategic interactions. Power is commonly defined as the capacity to control one's own resources and outcomes, as well as those of others (Thibaut and Kelley, 1959; Fiske, 1993; Keltner, Gruenfeld, and Anderson, 2003). When individuals have power, they depend less on others (Emerson, 1962) and are thus more likely to satisfy their own needs and desires (Galinsky, Gruenfeld, and Magee, 2003; Smith et al., 2008). In addition to the tangible outcomes that power helps attain, a great deal of research has demonstrated that power is associated with several psychological benefits and has important consequences for how people behave. For instance, laboratory studies have found that experiencing power increases optimism (Anderson and Galinsky, 2006) and the perception of personal control (Fast et al., 2009), and it triggers action

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consistent with one's goals (Anderson and Berdahl, 2002). Because increased power translates into reduced dependence in exchange relationships, those who lack power are motivated to increase it (Winter, 1973; McClelland, 1975; Fisher and Ury, 1981; Keltner, Gruenfeld, and Anderson, 2003; Dubois, Rucker, and Galinsky, 2010).

Given the importance of power, considerable research has investigated both the positive psychological effects and the intrapersonal consequences across contexts of having power. And yet, to date, little is known about the psychology, dynamics, and consequences of seeking and obtaining power in exchange relationships. The pursuit of power often entails costly investments, strategic behavior or changes to existing relational structures, all of which have the potential to shape intrapersonal and interpersonal dynamics in exchange relationships. For instance, a manager may invest effort in networking activities in an attempt to improve his or her leverage in salary negotiations or to achieve a sought-after, higher-status position in the organization. Similarly, a negotiator may spend time and energy in the pursuit of alternative options to the current deal in order to have more power at the bargaining table. Even at the organizational level, we regularly see firms investing in strategic alternatives that allow them to diversify risk in exchange relationships. Yet little has been done to evaluate whether and how the pursuit of power itself shapes both intrapersonal and interpersonal dynamics in exchange relationships.

This paper takes a first step toward understanding these dynamics by focusing on one particular strategy for obtaining power: investing in outside options. We chose this domain for several reasons. First, investing in outside options is one of the most common means by which parties seek to increase power in exchange relationships (Emerson, 1962). Second, this is a domain in which prior research on possessing power has demonstrated strong, robust results, allowing us to enrich prior work on the topic of outside options. For example, numerous studies have already compared the behavior of individuals in situations in which they (or their exchange partners) have outside options versus those in which outside options either are not present or are extremely unattractive (e.g., Fisher and Ury, 1981; Sondak and Bazerman, 1991; Mannix and Neale, 1993; Pinkley, Neale, and Bennett, 1994; Knez and Camerer, 1995; Tenbrunsel and Messick, 2001; Kim, Pinkley, and Fragale, 2005; Kim and Fragale, 2005; Magee, Galinsky, and Gruenfeld, 2007). These studies, along with many others, show how the existence (or increased attractiveness) of outside options can affect power dynamics, behavior, and outcomes in exchange relationships. In contrast, we examine an aspect of power, based on outside options, that has largely been ignored. Our focus is on how power was obtained in the first place—specifically, on whether costs were incurred in creating outside options.

By theoretically and empirically investigating the pursuit of power rather than power itself, our research pushes the extant literature on power to consider a new set of questions about the consequences of seeking and obtaining power. In addition to having theoretical relevance, these questions are of practical importance because the pursuit of power is a ubiquitous social and strategic phenomenon.

HOW GAINING POWER BY INVESTING IN OUTSIDE OPTIONS CORRUPTS

In their classic book on negotiation, Fisher and Ury (1981) argued that bargainers would be wise to invest resources in strengthening their “best alternative to a negotiated agreement,” which is the fallback option in the event that the parties fail to reach an agreement. This recommendation is supported by robust empirical evidence showing that the more attractive a negotiator’s best alternative to a negotiated agreement, the less dependent the negotiator is on the exchange partner for his or her outcomes, and the greater his or her power (Thibaut and Gruder, 1969; Pinkley, Neale, and Bennett, 1994; Pinkley, 1995; Lee and Tiedens, 2002).

Investing in outside options increases power because it gives individuals an improved alternative if the current exchange relationship cannot or will not provide the outcome they desire. Thus outside options often entail sunk (i.e., irrecoverable) investments that help keep open the possibility of pursuing a specific alternative course of action in the future. For example, an information technology firm that has no current plans to enter the telecommunications market may decide to keep this option alive by purchasing airwaves when the government auctions PCS (Personal Communication Service) bandwidths. Similarly, a manufacturing firm that is entering into an agreement with a supplier may make initial investments in becoming self-sufficient in the event that the relationship with the supplier ends or sours. In both of these examples, the parties are improving their walk-away options to enhance their leverage in the exchange relationship.

Opportunistic Behavior

To individuals and organizations that face risk or uncertainty in strategic environments, outside options are attractive for many reasons: they provide a means of increasing power, they hedge against downside risk, and they provide the economic and psychological benefits of flexibility (Adner and Levinthal, 2004). For these reasons, individuals and organizations will often incur the costs associated with creating or sustaining such options, if necessary. But whatever the reasons behind this decision, investing in an outside option can have unintended consequences: the number and types of alternatives that one party has may affect the perceptions, strategies, and behaviors of that party’s counterparts. For example, an exchange partner who has attractive alternatives to doing a deal may be perceived not only as powerful (Bacharach and Lawler, 1981; Pinkley, Neale, and Bennett, 1994; Pinkley, 1995), but perhaps also as uncommitted (Emerson, 1962, 1981; Ross, Anderson, and Weitz, 1997), uncaring (Fiske, 1993; Keltner and Robinson, 1997; Gruenfeld et al., 2008), or even unethical (Tenbrunsel and Messick, 2001). Thus parties who are deciding whether to invest in outside options should consider how other parties will react to their investment.

What this prior work has not considered, however, is the extent to which a party investing in outside options to enhance power can also affect that party’s *own* perceptions and behaviors in the current exchange relationship. Prior decision-making research has demonstrated that sunk costs influence people’s economic behavior across a variety of settings (Arkes and Blumer, 1985; Garland, 1990; Garland and Newport, 1991; Heath, 1995). Although basic

economic principles tell us that only incremental costs and benefits of current options should affect one's decisions (Arkes and Ayton, 1999), people commonly attend to prior investments—sunk costs—as they consider what course of action to take or what decision to make (e.g., Staw, 1976; Staw and Fox, 1977; Arkes and Blumer, 1985). For instance, Gino (2008) found that people were more likely to rely on advice from others when they invested money to acquire it than when they received it for free.

Existing research provides reason to believe that the costs in terms of time and resources incurred in creating an outside option will also have an impact on attitudes and behaviors aimed at an exchange partner. We propose that the more people have invested in an option, the greater will be their sense of entitlement in the current exchange relationship, the higher will be their aspirations for what is to be gained in the relationship, and the more likely will it be that they engage in opportunistic behavior to achieve their goals. To our knowledge, this set of predictions has never been articulated or tested directly, but some existing research provides a basis for motivating and developing the logic for our hypotheses. For example, one study showed that people who experience an unpleasant event after having (vs. not having) expended resources to ensure a happy life often believe they are more deserving of special treatment (e.g., Shabad, 1993; Bishop and Lane, 2000, 2002). In another study, participants who spent time or energy interacting with another person were more likely to display a heightened sense of entitlement when the person had (vs. had not) treated them unfairly (Zitek et al., 2010). This suggests that a personal investment of resources may lead to a heightened sense of entitlement, especially in the aftermath of a perceived negative outcome.

In terms of the pursuit of power, the negative experience stems from the realization that time or money was invested in creating outside options that people now plan to forego. Especially when abandoning such options, people may feel as though they are wasting resources, which can create negative feelings (Arkes, 1996). The larger the prior investment in outside options, the more negative the experience of "wasting" resources is likely to be (Arkes, 1996). For example, if a job applicant invests significant amounts of time and money researching and visiting with a particular company to secure a job offer, these investments may feel like a "waste" if the applicant later receives an offer from a preferred employer. Such behavior reflects mental accounting (Thaler, 1985, 1999), a cognitive process in which individuals open a "mental account" for an activity and later do not want to leave it "in the red." That is, if a job applicant has incurred losses in a particular account (by searching for a job, as in the above example), he or she may try to leave the account with a positive or zero balance by asking for more in the current negotiation with his or her top choice. As Thaler (1999) stated, "a prior (sunk) cost is attended to if the current decision is in the same account." In the pursuit of power in negotiation, prior investments in outside options would be encoded as a loss that requires a counterbalancing gain to settle the mental account. Thus we hypothesize:

Hypothesis 1: Party B will behave more opportunistically in strategic interactions with Party A when Party B's outside option to the exchange was costly rather than free.

When individuals have invested in outside options that they then perceive as losses or sunk costs, they are likely to feel entitled and deserving of better outcomes in the current chosen exchange relationship. Past research has demonstrated that it is not too difficult to make people feel entitled to resources they actually do not deserve. For instance, merely designating study participants as leaders causes them to feel entitled to, and to allocate to themselves, more money than their fellow participants (De Cremer and Van Dijk, 2005). Similarly, participants who receive more money than they were actually promised for completing a task evaluate the extra payment as perfectly fair, even if they see that another person who completed the same task has received no bonus (O'Malley, 1983). Based on this prior research, we expect that people who invest costly resources in outside options will experience a heightened sense of entitlement.

A greater sense of entitlement is likely to result, in turn, in inflated aspirations about the outcome of the current exchange relationship. When people feel entitled, they come to believe that they are more deserving of resources than others (e.g., status, material gain), even when the amount of effort they put toward gaining those resources does not warrant that outcome (Twenge and Campbell, 2009). Prior research has also found that entitlement leads people to experience a heightened subjective sense of power (Major, 1993; see also De Cremer and Van Dijk, 2005; De Cremer, Van Dijk, and Folmer, 2009), which in turn leads to higher aspirations (Pruitt and Carnevale, 1993; Pinkley, 1995). Similarly, those who believe they deserve and can obtain more tend to set higher aspirations for themselves in negotiations with others (e.g., Mannix and Neale, 1993; Pinkley, Neale, and Bennett, 1994; De Dreu, 1995; De Cremer and Van Dijk, 2005).

Finally, people experiencing a sense of entitlement, who therefore have inflated aspirations about what is to be gained from the exchange relationship, will be more likely to engage in exploitative and opportunistic behavior as a means to achieve these aspirations. Aspirations trigger goals for parties in an exchange relationship, and higher aspirations lead to more aggressive goals (Wolfe and McGinn, 2005). Goal attainment is not only economically but also psychologically rewarding (Bandura, 1991; Gellatly and Meyer, 1992; Heath, Larrick, and Wu, 1999). As a result, the goals that are triggered by higher aspirations can lead to self-serving, opportunistic behavior. Consistent with this argument, people have been found to be more likely to engage in unethical behavior when they are trying to achieve specific, aggressive goals (Schweitzer, Ordóñez, and Douma, 2004). Thus by increasing the sense of entitlement people experience and, as a result, their aspirations, investments in outside options can result in opportunistic behavior. For example, a firm that has invested heavily in fostering relationships with several potential exchange partners, but then picks just one to the exclusion of all others (e.g., for a joint venture or alliance), may feel entitled to a greater share of the profits than would be otherwise expected or normative (cf. Huber and Neale, 1987). The foregone investments—and not simply the leverage provided by the outside option—may thus lead to behavior that is self-serving and, perhaps, exploitative of the partner. Thus, we hypothesize:

Hypothesis 2: The effect of outside options on opportunistic behavior will be mediated by heightened entitlement, and a resulting increase in aspirations, of those who incurred a cost in creating or sustaining their outside option.

Investors in outside options also impose consequences on their exchange partners. Unless Party A anticipates the effect of Party B's prior investment on Party B's behavior, Party A is at greater risk of being exploited (cf. Galinsky et al., 2008). In a variety of social and strategic domains, individuals fail to consider the decision-making perspective of others even when others' decisions will affect their own outcomes (Jones and Nisbett, 1972; Knez and Camerer, 1995; Galinsky and Mussweiler, 2001; Tor and Bazerman, 2003; Bazerman, 2005; Moore, 2005). In the context of trust relations, Malhotra (2004) found that parties often inappropriately account for the factors that affect a counterpart's decisions. Perspective-taking failures are likely to surface in the pursuit of power because sunk-cost effects tend to be subtle. These perspective-taking failures would lead to greater trust in a counterpart than is warranted. Specifically, if Party A is unable to foresee the effect of costly outside options on Party B's willingness to behave opportunistically, Party A will not adjust his or her level of trust appropriately downwards and may suffer a worse outcome as a result of trusting too much. This reasoning suggests the following:

Hypothesis 3: Party A is more likely to obtain worse outcomes in strategic interactions with Party B when Party B's outside option to the exchange was costly rather than free.

Overview of the Studies

According to the theoretical model underlying our hypotheses, the extent to which a party has sunk investments in outside options influences that party's sense of entitlement. In turn, this greater entitlement results in higher aspirations in the current exchange relationship which, in turn, motivate opportunistic behavior. We tested our hypotheses in three studies.

In our research, we kept objective power based on the existence of outside options constant across conditions, but we varied the sunk costs a decision maker incurred in obtaining that power. We used this approach to mirror myriad real-world scenarios. In the real world, in fact, the existence of outside options, however attractive or unattractive, is the modal case (Fisher and Ury, 1981; Thompson, 1991, 2005; Knez and Camerer, 1995); what often varies is whether and the degree to which costs were incurred in creating these options. For example, some graduating MBA students must laboriously seek a second job offer to improve their bargaining prospects with the desired employer, whereas others have a standing offer from a firm they worked for prior to starting school that they can now use as leverage. Likewise, some firms are in industries in which there is a large number of potential exchange partners (e.g., suppliers), whereas others have to invest heavily in creating viable alternatives, such as global outsourcing or manufacturing in-house, in the event that their one current supplier behaves opportunistically. Finally, some individuals are born into well-connected families, whereas others have to work hard to create their social networks. As such, in each of our studies, we compared situations in which outside options always existed and were always equally attractive, but we varied whether sunk costs were incurred in the creation of the outside option.

Study 1 tested hypothesis 1 in a context-rich scenario study involving joint venture negotiations. This study also evaluated different mechanisms that might explain the effect of prior investment on opportunism and tested the mediating prediction of hypothesis 2. Study 2 investigated hypotheses 1 and 3 in the context of the Trust Game (Berg, Dickhaut, and McCabe, 1995), using behavioral measures and monetary incentives. Finally, Study 3, which also included behavioral measures and monetary incentives, provides further evidence supporting our theoretical model using a laboratory study in which participants engaged in a one-on-one negotiation using a live chat program.

STUDY 1

Study 1 was designed to test our first two hypotheses. First, we tested whether costly vs. free outside options have a differential impact on the willingness to engage in opportunism. We included two levels of costly investments to test whether a more expensive sunk investment would result in even greater opportunism. We also evaluated the mediating mechanisms of the main effect.

Method

Participants. Two hundred seven adults (44 percent female, mean age = 28.4) were recruited via advertisements posted on the Internet Web site of an experimental lab at a large public university in the United States. Participants were undergraduate or graduate students (71 percent) and non-students (29 percent), and they were paid \$7 for completing the study.

Design and procedure. The study employed one between-subjects manipulation with three conditions: high-cost outside option vs. low-cost outside option vs. free outside option. Participants were randomly assigned to one of these three conditions. Across all conditions, they read a scenario asking them to imagine themselves as the CEO of Company A. The scenarios were identical in all respects except that participants in both the high-cost and low-cost conditions were told that their outside alternative had entailed a prior investment; there was no mention of any sunk investment in the free-option condition, although the outside alternative was identical across all three conditions.

Participants were told that they were negotiating an information technology joint venture with the CEO of Company B. The total value of the project was estimated at \$30 million. Negotiations would determine whether a deal was consummated and how this value would be allocated. If there were no deal, the participants (i.e., the CEO of Company A) had the option of starting their own information technology subsidiary, but this outside option was worth only \$5 million to them. The Appendix provides the full text of the scenario.

In the high-cost option condition, participants were told that the outside option existed because they had invested \$3 million in start-up costs six months ago. At that time, participants were told, the joint venture possibility had been unclear, and if the start-up costs had not been incurred, the outside option could not have been maintained. In the low-cost option condition, participants were given similar information, but this time the investment they had

made six months earlier was equal to \$1 million. The scenario given to participants in the free-option condition did not include this information. Notably, this distinction relates only to sunk costs, as the value of the outside option is identical across both conditions once the negotiation begins. From a strictly rational perspective, the sunk cost should not affect the negotiation.

After carefully reading the scenario, participants responded to questionnaire items that assessed their willingness to behave opportunistically, sense of entitlement, and level of aspiration. To ensure that the mere mention of a monetary investment in the costly conditions had (a) not made the outside options more salient in those conditions and (b) not influenced participants' perceptions of their own risk tolerance, the questionnaire included a measure of saliency of the outside option and a measure of participants' risk-seeking behavior. We included both measures to rule them out as alternative mechanisms explaining our hypothesized relationships.

In addition, we included two other measures that would allow us to test for alternative mechanisms that might explain our predicted effects. The first possibility is that costly versus free outside options result in different framings of the relationship that is now being pursued. For example, those who incurred a cost in order to build their outside options may see their exchange partners in more instrumental (e.g., "money-making") terms; in contrast, those whose outside options were costless may see exchange partners in more relational terms (cf. Emerson, 1981; Molm, Peterson, and Takahashi, 1999). If this were the case, we would expect that differences in how the exchange relationship is perceived will mediate the effect of outside options on opportunism.

A second possibility, which we also tested, is that having had to invest resources in an outside option might result in a heightened valuation of that option. As a result, more will be needed—at a minimum—to forego the outside option. If this were the case, we would expect to find that those with costly, rather than free outside options have a higher reservation value for doing the deal with Company B. In other words, the minimum amount someone needs before foregoing the outside option will be higher if the outside option was costly rather than free.

Measures

Dependent measure. In the absence of existing scales that measure opportunism, we created a measure based on Jap and Anderson's (2003: 1686) description of the two "elements" of opportunism: "(i) distortion of information, including overt behaviors such as lying, cheating and stealing, as well as more subtle behaviors such as misrepresenting information by not fully disclosing, [and] (ii) renegeing on explicit or implicit commitments such as shirking, or failing to fulfill promises, and obligations." Our participants answered three questions using 7-point Likert-type scales (ranging from 1 = not at all, to 7 = extremely): (1) "How obligated do you feel to act in a completely trustworthy and honest manner in your dealings with Company B?" (2) "When negotiating with Company B, how committed are you to negotiating openly and in good faith?" and (3) "When negotiating with Company B, to what extent are you going to be opportunistic?"

Consistent with Jap and Anderson's (2003) characterization of opportunism, question 1 focuses on the participant's commitment not to distort information, and questions 2 and 3 focus on the participant's commitment not to renege on commitments and obligations. The first two of these questions were framed positively (e.g., "How committed are you to negotiating . . . in good faith"), rather than negatively, because of the concern that asking "How committed are you to negotiating in bad faith" may appear awkward and cause participants to become more sensitive to the experimenter's demands. As a result, responses to questions 1 and 2 were reverse-coded, such that higher numbers would represent greater willingness to behave opportunistically. We reverse-scored the first two items and then combined the responses to the three questions to form an index of opportunism (Cronbach's alpha = .72).

Aspirations. We included two measures of aspirations. First, we adapted Wolfe and McGinn's (2005) one-item measure to our context and asked participants to indicate how much of the \$30 million joint venture value they hoped to capture for themselves (in millions of dollars).¹ Second, we asked them to answer the following three questions using a 7-point scale (1 = not at all, 7 = extremely): (1) "How high are your aspirations for the value you think you can capture for yourself?" (2) "How high are your goals for the negotiation with Company B in terms of the value you want to capture for yourself?" and (3) "How high are your objectives for the negotiation with Company B in terms of the value you want to capture for yourself?" We combined the responses to these three questions into an index of aspirations (Cronbach's alpha = .88).

Entitlement. We assessed feelings of entitlement by adapting Zitek et al.'s (2010) measure. Participants were asked to indicate how they felt when thinking about their negotiation with Company B by indicating the extent to which they agreed with each of five statements, using a 7-point scale (1 = strongly disagree, 7 = strongly agree), which included items such as "I deserve a good deal in this negotiation," "I am entitled not to suffer too much from this deal," and "I deserve more value than Company B from the deal." Their answers were combined into an index of entitlement (Cronbach's alpha = .84).

Alternative mechanism #1: Nature of the exchange relationship. To test whether costly vs. free options led to different perceptions of the nature of the exchange relationship, we asked participants to answer the following question: "To what extent do you see your relationship with Company B as being . . . (a) an economic relationship, (b) a relationship of trust, (c) about making money, and (d) about working well together." Responses to each of these statements were measured on a 1–7 Likert-type scale on which 1 = "not at all" and 7 = "completely." Responses to statements (a) and (c) were significantly correlated ($r = .46, p < .001$) and were combined (Cronbach's alpha = .63) to create an index of "Instrumental Partnership." Responses to statements (b) and (d) were significantly correlated ($r = .75, p < .001$) and were combined (Cronbach's alpha = .86) to create an index of "Relational Partnership."

¹ Wolfe and McGinn (2005) measured aspirations using the following question: "How much do you hope to achieve in this negotiation (i.e., your goal)?"

Alternative mechanism #2: Reservation price. We included a question to control for the possibility that the sunk investment (in the high-cost and low-cost option conditions) may have heightened the participant's perception of the outside option's value. This could happen, for example, if the participants in the costly option conditions decided to ignore the stated value of the outside option and instead extrapolated on the implied "return on investment" they had already witnessed in the option since the initial investment was incurred six months earlier. Specifically, participants were asked to state their *reservation value* in the negotiation with Company B: "What is the *lowest* amount you would be willing to accept (of the total \$30 million) before rejecting the offer and instead starting your own subsidiary? \$million."

Alternative mechanism #3: Saliency of alternative option. We assessed the saliency of the alternative option by asking participants to indicate how salient this outside option would be in their mind if they were to negotiate with Company B (on a 7-point scale, ranging from 1 = "not at all" to 7 = "very much").

Alternative mechanism #4: Propensity for risk taking. We also assessed participants' propensity for risk taking by asking them to indicate how much of a risk taker they considered themselves to be (on a 7-point scale, ranging from 1 = "very risk-averse" to 7 = "very comfortable taking risks").

RESULTS

Opportunism. In the first analysis, we regressed opportunism on option condition (high-cost vs. low-cost vs. free) in a univariate analysis of variance (ANOVA). Providing strong support for hypothesis 1, opportunism varied significantly by condition, $F(2, 204) = 24.53, p < .001$. Participants in the high-cost option condition reported a higher willingness to behave opportunistically when dealing with the CEO of Company B (mean = 4.54, S.D. = 1.54) as compared with participants in the low-cost option condition (mean = 3.87, S.D. = 1.31, $p < .01$) and the free option condition (mean = 3.10, S.D. = 0.84, $p < .01$). Furthermore, participants' willingness to behave opportunistically was higher in the low-cost option condition than in the free option condition ($p < .01$).²

Feelings of entitlement. Consistent with the mechanisms articulated in our theoretical model, feelings of entitlement differed as predicted across conditions, $F(2, 204) = 9.41, p < .001$. Entitlement was higher for participants in the high-cost option condition (mean = 5.34, S.D. = 0.82) than it was for participants in either the low-cost option condition (mean = 4.99, S.D. = 0.89, $p = .052$) or the free option condition (mean = 4.56, S.D. = 1.35, $p < .01$), and differed significantly between the latter two conditions ($p < .05$).

² The results of the analyses discussed in this section did not change in nature nor in significance when we included instrumental partnership, relational partnership, reservation value, risk-taking propensity, and salience as control variables.

Table 1. Summarized Results of Path Analysis, Study 1*

Measures	Feelings of entitlement		Aspirations		Opportunism	
	(1)	(2)	(3)	(4)	(5)	(6)
Low-cost option	.43*	.49**	.34*	.76***	.63**	.43*
	(.18)	(.18)	(.17)	(.20)	(.20)	(.17)
High-cost option	.78***	.88***	.60**	1.43***	1.19***	.84***
	(.18)	(.18)	(.18)	(.21)	(.21)	(.18)
Entitlement			.37***		.31***	.09
			(.07)		(.07)	(.07)
Aspirations						.59***
						(.07)
R^2	.08	.10	.22	.19	.25	.45
ΔR^2			.12***		.06***	.19***
95% CI for the size of the indirect effect			.12, .51		.11, .44	.17, .59

* $p \leq .05$; ** $p < .01$; *** $p < .001$.

* Regression models are presented vertically; numbers across the top of the table in parentheses indicate different regression models, and the labels across the top of the table indicate the dependent measure for the regressions in the columns below. Entries in the columns are unstandardized regression coefficients, with standard errors in parentheses.

Aspirations. As predicted, our manipulation also influenced both measures of aspirations we included in the study: the self-reported measure of aspirations [$F(2, 204) = 11.88, p < .001$] and the dollar amount participants stated they would hope to receive [$F(2, 204) = 16.66, p < .001$]. Specifically, aspirations were higher on both measures for participants in the high-cost option condition (mean = 5.41, S.D. = 0.87 and mean = \$19.26M, S.D. = 3.89, respectively) than they were for participants in either the low-cost option condition (mean = 5.02, S.D. = 1.00, $p < .05$, and mean = \$17.29M, S.D. = 3.12, $p < .01$, respectively) or the free option condition (mean = 4.53, S.D. = 1.26, $p < .01$, and mean = \$15.76M, S.D. = 3.62, $p < .01$, respectively), and differed significantly between the latter two conditions ($p < .001$ and $p < .05$, respectively).

Three-path mediation model. We then tested our full theoretical model, and the mechanism articulated in hypothesis 2, by using a three-path mediation model (Taylor, MacKinnon, and Tein, 2008). In a three-path mediation model, two mediators intervene one after the other to explain the relationship between an independent variable and a dependent variable. The results are summarized in table 1. First, we tested the first half of the model by regressing aspirations on our outside option manipulation and on feelings of entitlement. As shown in table 1, columns 2 and 3, the extent to which participants felt entitled significantly affected their aspirations, and the effect of our outside option manipulation on aspirations was reduced when entitlement was added to the model. Next, we regressed opportunism on our outside-option manipulation, entitlement (the "stage 1" mediator), and aspirations (the "stage 2" mediator), as shown in table 1, columns 5 and 6. Participants' aspirations significantly

predicted opportunism, and the direct effect of our outside option manipulation on opportunism was reduced when the mediators were included in the model.

Following the approach recommended by Taylor, MacKinnon, and Tein (2008) for this type of model, we used a bootstrap procedure to test the magnitude of our indirect effects (one through entitlement and one through aspirations) separately. We implemented the bootstrap procedure by drawing 1000 random samples with replacement from the full sample. We then calculated each indirect effect using the bootstrap sample and constructed a bias-corrected confidence interval based on these results. As reported in table 1, the 95% bias-corrected confidence interval for each indirect effect excluded zero, thus providing evidence for significant indirect effects (Shrout and Bolger, 2002; MacKinnon, Lockwood, and Williams, 2004).

Ruling out alternative mechanisms. Notably, the experimental manipulation did not influence the expected saliency of the outside option (mean high-cost = 4.15 vs. mean low-cost = 4.03 vs. mean free = 4.10, $F < 1$), suggesting that the effects are not due to differences across conditions on the degree of salience of the outside option.

Reservation values also did not differ significantly across conditions (mean high-cost = \$14.25M vs. mean low-cost = \$14.14M vs. mean free = \$14.38M, $F < 1$), suggesting that the cost sustained for investments in an outside option does not result in heightened valuation for the foregone investment, and there is no reason to suspect that participants are extrapolating from differentials in implied returns on investment across conditions.

Similarly, our manipulation did not influence whether participants felt more risk-tolerant [$F(2, 204) = 1.95, p = .15$], nor whether they perceived the exchange relationship as more or less instrumental, or more or less relational (both $F_s < 1$). Thus neither risk tolerance nor any of these relationship "frame" variables can explain the effect of costly outside options on opportunism.

Discussion

Taken together, these results are consistent with our proposed model whereby (sunk) investments in outside options lead to heightened entitlement, which in turn increases aspirations, which in turn increase a party's willingness to behave opportunistically and exploit the current exchange partner.

STUDY 2

Our first study provides evidence in support of our hypothesized link between costly sunk investments and increased opportunism. We designed Study 2 to replicate the results of our first study using a behavioral measure of opportunism in a context involving actual interaction and monetary incentives. Study 2 also helps address a potential concern about the manipulation used in Study 1: when reading the scenario, it is possible that some participants may have assumed that the higher the sunk costs, the greater the reputational pressure the CEO would feel to recoup those costs. For instance, participants may have assumed that stockholders would have different expectations of the CEO depending on the extent to which he or she invested in outside options. Our second study addressed this concern by eliminating the potential presence of

outsiders who might put pressure on the decision maker. Finally, Study 2 also tested hypothesis 3, which predicted that others would be worse off when they interact with someone who incurred a sunk cost in creating outside options.

Method

Participants in Study 2 engaged in a two-person strategic interaction known as the "Trust Game" (Berg, Dickhaut, and McCabe, 1995).³ The interaction between the players was entirely anonymous (they interacted via computer), their identities were never disclosed, and they played a one-shot game (i.e., no repeat play).

A standard Trust Game could be structured as follows: Player 1 starts with a \$10 endowment; Player 2 starts with \$ 0. Player 1 decides how much of the \$10 to send to Player 2. The amount sent is tripled before Player 2 receives it. Player 2 then decides how much of the tripled amount to return to Player 1. Player 1's final payoff is equal to the amount initially kept plus the amount returned by Player 2. Player 2's final payoff is equal to the amount initially sent by Player 1, times three, minus what Player 2 returns to Player 1.

The Trust Game provides an ideal context in which to study the risk of opportunism. By sending money, Player 1 (the "trustor") creates value, but this decision entails risk because Player 2 (the "trusted party") may choose to behave opportunistically and send little or nothing back. "Trust" is measured by the amount that Player 1 sends to Player 2. "Trustworthiness" is measured by the degree to which Player 2 reciprocates (i.e., money returned as a percentage of money received). "Opportunism," which is the degree to which Player 2 exploits Player 1, can thus be calculated as the degree of non-reciprocity.

Outside options. The standard Trust Game, described above, was modified to include an outside option that gave Player 2 an alternative to accepting the amount sent by Player 1. Participants in the study were randomly assigned to one of two versions of the game. Approximately half participated in the "costly option" version of the trust game and half in the "free-option" version.

Both versions give Player 2 the exact same outside option: Player 2 can choose to receive a guaranteed \$10 (from the experimenter) instead of accepting the tripled amount sent by Player 1. In the costly option condition, Player 2s who want to have this option have to purchase it for \$2. In the free-option condition, the option is given to all Player 2s for free. Our primary analyses compare only those groups in which an outside option exists—i.e., all participants in the free-option condition with the subset of those in the costly option condition that purchased the option.⁴

For the sake of clarification, here is how the costly option condition game would proceed:

³ Berg, Dickhaut, and McCabe (1995) referred to this interaction paradigm as the "Investment Game."

⁴ Because this creates the possibility of a selection bias, we conducted and report on an extremely conservative test for selection effects below; the analysis strongly suggests that selection bias cannot explain our results.

Pre-Play:

1. Player 2 decides whether to purchase an option for \$2.
2. Player 1 is told whether Player 2 has purchased the option.

Player 1's Decision:

3. Player 1 decides how much of the \$10 endowment, if any, to send to Player 2.
4. Player 2 is told the tripled amount that is sent to him or her.

Player 2's Decision if Option Was Not Purchased:

5. If the option was not initially purchased, then Player 2 decides how much of the tripled amount to keep and how much to send back to Player 1.

Player 2's Decision if Option Was Purchased:

6. Player 2 decides whether to exercise the option (i.e., take the \$10 from the experimenter) or to forego the option (i.e., take the tripled amount sent by Player 1 and decide how much to return).
7. If Player 2 foregoes the outside options, payoffs are exactly as in the standard trust game, except that Player 2 has \$2 less due to the cost of having purchased the option.
8. If Player 2 chooses the outside option, the amount sent by Player 1 is lost. Player 1 only gets the amount he or she initially kept. Player 2 receives \$10 from the experimenter, minus \$2 paid for purchasing the option, for a total of \$8.

In the free-option condition, the key difference is in the pre-play: all Player 2s are automatically given the outside option, and Player 1s are aware of this.⁵ Otherwise, the game is played exactly as above, except that Player 2 does not incur a \$2 cost.

The outside option limits the downside consequences associated with a lack of trust (if any) shown by Player 1. The only difference between the two conditions is whether the outside option is costly or free. Notably, this distinction relates only to sunk costs, as the value of the outside option is identical once the two parties begin to interact. From a rational perspective, the sunk cost should not affect any decisions once the option has been purchased.

Hypothesis 1 predicted that Player 2s in the costly option condition would reciprocate less (i.e., return less money to Player 1s) than would Player 2s in the free-option condition. Hypothesis 3 predicted that Player 1s would have worse outcomes in the costly option condition than in the free-option condition because they would not adjust their level of trust (i.e., amount sent to Player 2) appropriately.

Participants. One hundred and fifty participants (50 percent female, mean age = 21.9) were recruited via advertisements posted on the Internet Web site of an experimental lab at a large private university in the United States.

⁵ In addition to varying the cost of the option, this procedure also varies whether participants must actively choose a course of action. In particular, those in the costly option condition must choose whether to purchase the option, while those in the free-option condition are automatically given this option and thus do not have a choice to make. Actively choosing an option could influence participants' subsequent behavior. For instance, Staw (1976) found that individuals escalated their commitment only when they made an active, initial choice to invest and not when they inherited the situation. We addressed this issue in Study 3, which eliminated choice in both conditions.

Table 2. Summarized Results of Study 2

Condition	Average amount sent by Player 1	Average % returned by Player 2*	Average Player 1 final payoff	Average Player 2 final payoff†
Free option	\$5.32 N = 22 S.D. = 4.12	112% N = 14 S.D. = .49	\$10.41 N = 22 S.D. = 3.76	\$12.45 N = 22 S.D. = 5.31
Costly option purchased	\$4.06 N = 35 S.D. = 4.17	36% N = 18 S.D. = .43	\$7.54 N = 35 S.D. = 3.47	\$13.09 N = 35 S.D. = 6.78
Costly option not purchased	\$5.83 N = 15 S.D. = 3.96	94% N = 12 S.D. = .57	\$10.37 N = 15 S.D. = 3.67	\$11.30 N = 15 S.D. = 7.725

* The percentage returned by Player 2 is calculated as [Amount returned / Amount sent]. Thus, a 100% return means that Player 2 returned an amount exactly equal to the *pre-tripled* dollars sent by Player 1. If the percentage returned is less than 100%, then Player 1 would have been better off not sending anything at all (i.e., keeping the \$10). Player 2s who were sent \$0 and had no ability to return any money were not included in this calculation.

† The final payoff for Player 2 in the Costly option purchased row takes into account (i.e., subtracts) the \$2 cost of the outside option for those who purchased it.

Participants were undergraduate students (67.8 percent), graduate students (27.6 percent), and non-students (4.6 percent).

Participants were randomly assigned to the role of Player 1 or Player 2, yielding 75 pairs, which were randomly assigned to one of the two conditions. Randomization was constrained by the need to recruit more participants for the costly option condition than for the free-option condition because not all participants in the costly option condition could be expected to purchase the outside option, which would reduce the amount of data available for analyses. Thus participants were assigned to the conditions on a 2:1 ratio, with 51 dyads in the costly option condition and 24 dyads in the free-option condition. Three dyads were eventually excluded from the study because at least one of the participants in each of these dyads revealed that he or she had not understood the instructions, leaving 50 dyads in the costly and 22 dyads in the free-option conditions. Inclusion of the excluded dyads does not affect the results reported here.

Results

Table 2 summarizes the results of Study 2. Seventy percent (N = 35) of Player 2s in the costly option condition purchased the outside option. In both conditions, Player 2s who had an outside option exercised it only when the tripled amount sent by Player 1 was less than \$10 (i.e., the value of the outside option). This occurred in 48.6 percent of the cases (N = 17) in the costly-option condition and in 36.4 percent of the cases (N = 8) in the free-option condition.⁶ Eighty percent of the Player 1s who sent a tripled amount less than \$10 (i.e., less than \$3.34 pre-tripled) sent \$0.

Notably, Player 1s sent more money to Player 2s, on average, when Player 2 had *chosen not to purchase* the outside option than when they had an outside option (costly or free). Because our hypotheses related only to

⁶ There was one exception to this. One participant in the free-option condition exercised the outside option despite having been sent \$15 by Player 1.

comparisons across contexts in which outside options exist, we defer our discussion of this intriguing finding until the General Discussion section of the paper.

Hypothesis 1 predicted that reciprocity would be lower (i.e., opportunism would be higher) among those Player 2s who purchased an outside option than among those who had a free outside option. Only those who had chosen not to exercise their outside options were included in the analysis because only these participants were in a position to reciprocate. Reciprocity was measured as the "percentage returned"—i.e., the amount returned (by Player 2) divided by the amount sent (by Player 1). "Amount sent" by Player 1 was included as a control variable in the analysis because prior research (Pillutla, Malhotra, and Murnighan, 2003) revealed that the percentage returned by Player 2s in a Trust Game tends to be positively correlated with amount sent. That is, Player 2s tend to send back higher percentages as the amount sent increases.

As predicted, reciprocity among those who purchased the outside option (in the costly option condition) was significantly lower than among those who had a free outside option [$F(1, 32) = 23.45, p < .001$]. The average amount returned in the free-option condition was 112 percent of the pre-tripled amount sent by Player 1. Thus Player 1s who sent money in the free-option condition were, on average, better off for having trusted Player 2. In comparison, the average Player 2 in the costly option condition returned only 36 percent of the pre-tripled amount sent. In other words, Player 1s in the costly option condition, on average, would have been monetarily much better off sending nothing at all.

Thus, as in Study 1, the decision to purchase an outside option heightened opportunism (decreased reciprocity) after the trusted party decided not to exercise the option (i.e., even when the option was foregone). It is important to note that because the analysis controlled for the amount sent by Player 1, the lower degree of reciprocity in the costly option condition was not simply due to less money being made available to Player 2. The analysis shows that, for the same amount sent, Player 2s in the costly option condition returned much less than those in the free-option condition.

Table 3 demonstrates this pattern by comparing, across the two conditions, how much Player 2s returned for each dollar amount sent by Player 1s. For example, when Player 1s trusted fully and sent their entire \$10 endowment, Player 2s in the free-option condition returned, on average, \$12.50. In comparison, Player 2s in the costly option condition returned, on average, only \$5.25. It is also worth noting that, as shown in the table and described in greater detail below, Player 2's reciprocity diminished far more (in the costly option condition) than was necessary to recoup the \$2 sunk investment. The above analysis provides strong support for hypothesis 1.

Although opportunism was higher among those Player 2s who had purchased an outside option, Player 1s seemed not to have adjusted their level of trust sufficiently. On average, Player 1s sent less money in the costly option condition (\$4.06) than in the free-option condition (\$5.32), but this difference was not significant [$F(1, 57) = 1.25, p = .30$]. The direction of this difference suggests that participants expressed some distrust of the counterpart who purchased an outside option and may have had higher expectations of cooperation from the counterpart who did not invest money in this option. It is possible that, with a larger sample, we would have found a significant difference across

Table 3. Amount Returned as a Function of Amount Sent (across Conditions), Study 2

Amount sent by Player 1	Tripled amount received by Player 2	Average amount returned by Player 2	Average % returned by Player 2 (amount returned / amount sent)	N
Costly option condition				
\$ 0	\$ 0	Option exercised	-	15
\$ 1	\$ 3	Option exercised	-	1
\$ 2	\$ 6	-	-	0
\$ 3	\$ 9	Option exercised	-	1
\$ 4	\$ 12	\$ 0	0%	1
\$ 5	\$ 15	\$ 1.70	34%	5
\$ 6	\$ 18	\$ 1.00	17%	2
\$ 7	\$ 21	-	-	0
\$ 8	\$ 24	\$ 0	0%	1
\$ 9	\$ 27	\$ 5.00	56%	1
\$ 10	\$ 30	\$ 5.25	53%	8
Free-option condition				
\$ 0	\$ 0	Option exercised	-	5
\$ 1	\$ 3	-	-	0
\$ 2	\$ 6	\$ 1.00	50%	2
\$ 3	\$ 9	Option exercised	-	1
\$ 4	\$ 12	\$ 2.50	63%	3
\$ 5	\$ 15	\$ 2.50	50%	2
\$ 6	\$ 18	-	-	0
\$ 7	\$ 21	-	-	0
\$ 8	\$ 24	\$ 10.00	125%	1
\$ 9	\$ 27	-	-	0
\$ 10	\$ 30	\$ 12.50	125%	8

conditions, and so we will not overinterpret the null-result element of this finding. Nonetheless, even if the amounts sent by Player 1s across these conditions were significantly different, the adjustment made by Player 1s would be insufficient to protect them against the degree of opportunism Player 2s displayed in the costly option condition. In other words, and as predicted by hypothesis 3, insufficient sensitivity to the effects of sunk investments had implications for Player 1s' outcomes: Player 1s' payoffs were significantly lower in the costly option condition than in the free-option condition [$F(1, 57) = 8.65, p < .01$]. Average Player 1s' payoffs were \$7.54 in the costly option condition and \$10.41 in the free-option condition. This again demonstrates that, on average, Player 1s in the costly option condition would have been monetarily much better off sending nothing (i.e., not trusting at all) and keeping their \$10 endowment. Only one participant in the entire costly option condition received more from Player 2 than the pre-tripled amount he or she sent. There is evidence to suggest that some Player 1s anticipated high levels of non-reciprocity in this condition: a much higher percentage of Player 1s sent \$ 0 in the costly option condition (43 percent, $N = 15$) than in the free-option condition (23 percent, $N = 8$).

It is worth noting that total payoffs (Player 1 + Player 2) are slightly higher (though not significantly) in the free-option condition (\$22.86) than in the costly option condition (\$20.63). If the \$2 cost to Player 2s who purchased the costly option is adjusted for, this difference is almost entirely eliminated. Thus lower

Player 1 payoffs in the costly option condition cannot be attributed to less value creation in that condition; rather, they are due to the seeming inability of Player 1s to predict and adjust for the heightened opportunism of exchange partners who have sought to increase their power by investing in foregone outside options.

Testing for Selection Bias

One potential problem with these analyses is that all Player 2s in the free-option condition were included in the analysis, because they all had outside options, but Player 2s in the costly option condition were only included in the analysis if they had *chosen* to purchase the outside option. This is problematic because those who choose to purchase outside options and those who do not may differ in ways that could influence the results. For example, if those who are inclined to purchase outside options are also less trustworthy than the average participant, then our results may be driven by something other than the effect of sunk costs; they could be due to a selection bias, as we are comparing a random sample of the population (in the free-option condition) with a subsample of the population that tends to be less trustworthy (in the costly option condition).

Fortunately, the data allow for a very conservative test of this alternative explanation: we could compare all 70 percent of participants in the costly option condition who purchased the outside option with the most opportunistic (i.e., least reciprocating) 70 percent of those in the free-option condition. This comparison reveals that reciprocity among the 70 percent who chose to purchase an outside option (in the costly option condition) was still considerably lower than reciprocity among the least reciprocating of those in the free-option condition: 36 percent versus 96 percent, a significant difference [$t(26) = 3.34, p < .01$]. This makes the selection bias explanation implausible by showing that all 70 percent of those who purchased an outside option behaved more opportunistically than the worst 70 percent of those who did not have to make this choice.

Supplemental Analysis: Not Simply Recovering Sunk Costs

We also tested whether the increased opportunism (i.e., non-reciprocity) was entirely explained by a straightforward desire to recover the value of the sunken investment. In other words, Player 2s who had spent \$2 (in the costly option condition) may have wanted to recover their investment and may have felt entitled to \$2 more than did Player 2s in the free-option condition. According to this perspective, reciprocity by Player 2s in the costly option condition may be absent for the first \$2 of tripled money received, but for each additional dollar received (above the first \$2) reciprocity should be similar to that in the free-option condition. As the results in table 2 clearly indicate, however, the level of non-reciprocity among those in the costly option condition is much greater than a desire to recover this amount.

We then conducted an even more conservative test, allowing those in the costly option condition to reciprocate not at all for the first \$10 received—i.e., the full amount of the outside option they had purchased. In other words, we would not count as “opportunistic” even a complete lack of reciprocity for the

first \$10 received in the costly option condition. For this analysis, then, we measured reciprocity in the costly option condition as $[\text{Money returned} / (\text{Money sent} - \$10/3)]$ but continued to measure reciprocity in the free-option condition as $[\text{Money returned} / \text{Money sent}]$. Using the alternative measure of reciprocity, which allows costly option participants to reciprocate \$ 0 for the first \$10 received (i.e., \$10/3 sent) without it counting against them, yields a *revised* reciprocity level of 67 percent in the costly option condition, which is still considerably less than the *unrevised* reciprocity level of Player 2s in the free-option condition (112 percent), $[F(1, 32) = 3.62; p < .07]$. This suggests that the heightened aspirations of Player 2s in the costly option condition exceed any reasonable (or in this analysis, even unreasonable) measure or interpretation of “wanting to recover sunk costs.”

Discussion

Study 2 replicated the basic finding of Study 1 using behavioral measures of opportunism in a context with monetary incentives. We again demonstrated that a foregone outside option can significantly increase opportunism—if the option was created at some cost. While most Player 2s in the free-option condition reciprocated enough to reward Player 1s for trusting, Player 2s in the costly option condition exploited Player 1s to the point at which sending no money (i.e., trusting not at all) was clearly the best option. Follow-up analyses revealed that the degree to which investment in outside options enhanced opportunism does not seem to be explained by selection bias, nor by a “reasonable” demand for “payback” of money sunk in the investment, nor even by a somewhat “unreasonable” demand for payback. Most Player 1s were insufficiently sensitive to these effects and did not adjust their level of trust appropriately.

STUDY 3

So far, our results provide support for the hypothesized relationship between sunk investments in outside options and opportunism in the current exchange relationship. We further investigated this hypothesis using a behavioral study in which two parties negotiated via live chat. Study 3 allowed us to measure opportunism by examining the extent to which participants with a costly or free outside option deceived their counterpart during the negotiation. In addition, this study allowed us to address the potential concern in Study 2 that participants could choose whether to invest in an outside option. Although we showed evidence that refutes a selection effect explanation in Study 2, our design of Study 3 entirely eliminated any such concern because participants were simply told whether they invested a lot versus almost nothing in creating the outside option.

Method

Participants. Participants were recruited using advertisements posted on the Internet Web site of an experimental lab at a large private university in the United States. The advertisement explained that the study would be conducted in the lab and would involve negotiating with another randomly selected person

as well as responding to a few questionnaires. One hundred seventy-six individuals (46 percent male, mean age = 21.7) at local universities in a city in the Northeastern United States participated in a simulated negotiation using live chats.

Procedure. Participants negotiated a simulated employment contract, adapted from Olekalns and Smith (2007). Participants were randomly assigned to the role of either an employer or an employee. Their written instructions described the task and included a payoff schedule that explained the points awarded for each possible contract. Table 4 summarizes the information regarding payoffs for each role.

Potential for opportunism. Participants were asked to reach agreement on three issues. On two of the issues—salary and annual bonus—the applicant and the recruiter had divergent interests (with the employer wanting to pay less and the employee wanting to be paid more). On the third issue, start date, the recruiter preferred an early start, whereas the applicant was entirely indifferent to the start date. We structured the payoffs in this manner to create the potential for opportunism. Prior research has shown that negotiators sometimes deceive their counterparts by pretending to have a preference on issues to which they are actually indifferent; by doing so, they can extract concessions on other issues (see Schweitzer and Croson, 1999; Schweitzer, DeChurch and Gibson, 2005; Olekalns and Smith, 2007). We were interested in testing whether such behavior would be more likely in the shadow of costly (vs. free) foregone outside options. Participants in both roles were told that their goal was to make “the value of the contract as high as possible for yourself” and that the best possible contract (i.e., if the other party agreed to all of their demands) was worth 12,000 points to them. The start-date issue was described to each party as follows. Recruiters were told:

Among the issues to specify in the contract, you are very concerned about when your new recruit starts work. You are interviewing for a position that will be vacant in six weeks and it is important for your organization that you fill it as quickly as possible. Ideally, your new recruit would start in two weeks, to receive appropriate training before the job becomes vacant. If absolutely necessary, you could wait up to six weeks, but this is not ideal for you. Based on your experience with such negotiations, you anticipate that the recruit will want a high salary, a high bonus, and a late start date (in order to get six weeks of vacation time before starting).

Meanwhile, applicants were told:

Among the issues to specify in the contract, you have strong preferences on salary and annual bonus, but you are not really concerned about when you start work. However, you have reason to believe that the employer wants you to start as early as possible. Based on your preliminary conversations with the employer, the employer may be under the impression that you want to delay starting for six weeks in order to take some vacation time. In fact, you are entirely indifferent with regards to whether you start in two weeks or whether you start in six weeks. If you were to agree to start in two weeks, it would benefit (and perhaps surprise) the employer a lot.

Free vs. costly outside option. We introduced our experimental manipulation only on participants in the role of applicant and embedded it in the instructions. Participants in the role of applicants were assigned to one of two conditions. In the free-option condition, participants were told:

If you had not received an offer from this company, your alternative would have been to work for a similar company in Europe. The job offer from Europe—which you no longer plan to accept—was not something you had worked hard to obtain; a chance encounter with a recruiter had resulted in a quick round of interviews, followed by an offer. However, the compensation offered by the European firm was significantly less attractive, and you have a strong preference for living in the U.S. You have therefore chosen to negotiate a final contract with this U.S. employer, and forego the alternative (European) offer you had received.

In the costly option condition, participants were told:

If you had not received an offer from this company, your alternative would have been to work for a similar company in Europe. The job offer from Europe—which you no longer plan to accept—was something you received after investing considerable energy during the recruiting season. Because you wanted to make sure you found the right job, you spent a lot of your own time and money seeking out the right recruiters and the right companies, and visiting the potential employer. However, at the end of the day, the compensation offered by the European firm was significantly less attractive, and you have discovered that you have a strong preference for living in the U.S. You have therefore chosen to negotiate a final contract with this U.S. employer, and forego the alternative (European) offer which you spent so much time and money obtaining.

Each negotiation was conducted over the Internet, using live chat software, and the chat transcripts were recorded for subsequent coding. After preparing for the negotiation, but prior to negotiating, participants were asked to fill out a survey measuring their feelings of entitlement (using the same items as in Study 1, Cronbach's $\alpha = .78$) and their aspirations for the negotiation by indicating the best contract they realistically hoped to get (in points). To strengthen the effectiveness of our manipulation, the last question in the survey asked participants to spend two minutes thinking and writing about their goals in the negotiation, about their alternatives to this deal, and about what they deserved.

Salience of the outside option. The questionnaire also included a few questions designed to assess the salience of the alternative option so that we could rule out salience as a potential alternative explanation for our findings (as we did in Study 1). Specifically, we asked participants in the role of applicant to answer the following two questions using a 7-point scale (1 = not at all, 7 = very much): (1) "To what extent do you think the alternative offer in Europe is relevant to the current negotiation?" and (2) "How likely are you to mention this alternative in your negotiation?" We aggregated responses to these two questions into an index of salience (Cronbach's $\alpha = .65$).

Table 4. Payoff Table for Recruiters and Applicants, Study 3

Issue	Option	Points worth to applicant	Points worth to employer
Salary	\$110,000	0	2,000
	\$120,000	1,500	1,500
	\$130,000	3,000	1,000
	\$140,000	4,500	500
	\$150,000	6,000	0
Annual bonus	2%	0	6,000
	4%	1,500	4,500
	6%	3,000	3,000
	8%	4,500	1,500
	10%	6,000	0
Start date	In 2 weeks	0	4,000
	In 3 weeks	0	3,000
	In 4 weeks	0	2,000
	In 5 weeks	0	1,000
	In 6 weeks	0	0

Incentives. Participants were given 30 minutes to negotiate with their counterpart. As the instructions informed them, participants in each role would receive a default total of 3,000 points for themselves if they did not reach an agreement within the time limit. In addition to a \$20 show-up fee, participants received a bonus based directly on the value of the contract that they negotiated. For each 1,000 points that their contract earned, they received a lottery ticket that could help win one of ten \$50 prizes. The more tickets they had in the lottery, the better their chances of winning one of the prizes. Table 4 shows the payoff associated with each option participants could agree to in their negotiations.

Final questionnaire. After the 30 minutes were over, participants in each role were asked to fill out a final questionnaire. In addition to demographic questions, the questionnaires included measures in which participants reported on their perceptions of the counterpart's trustworthiness and the extent to which they thought the counterpart lied during the negotiation. We assessed trustworthiness using nine items adapted from Mayer and Davis (1999), designed to measure ability (Cronbach's alpha = .90), benevolence (Cronbach's alpha = .75), and integrity (Cronbach's alpha = .83).

Measuring opportunism. In the exchanges over chat, we identified every instance in which negotiators in the role of applicants mentioned the indifference issue (start date) in a way that suggested an attempt to deceive. Drawing on past research, we considered both active and passive forms of deception (Bok, 1978; Ekman, 2001). Active deception refers to the misrepresentation of a situation by giving false information. Passive deception refers to the concealment of information. These two types are sometimes referred to as "sins of commission" and "sins of omission," respectively (Spranca, Minsk, and Baron,

1991; O'Connor and Carnevale, 1997; Schweitzer and Croson, 1999). Using O'Connor and Carnevale's (1997) definition, we coded any strategic use of the indifference issue in order to extract a concession on other issues as a sin of omission, or passive deception.

Two coders, blind to the study's hypotheses, coded instances of active or passive deception. Interrater reliability, as measured by r_{wg} , was 0.93. We note that, similar to prior research on deception (Olekalns and Smith, 2007), we found that not all negotiators engaged in active and passive deception.

Results

We first examined whether the frequency of deception varied depending on the cost of the investment in the outside option. Participants in the role of applicants in the costly option condition engaged in more active deception (mean = 1.02, S.D. = 0.77) and passive deception (mean = 0.79, S.D. = 0.89) than did applicants in the free-option condition (mean = 0.60, S.D. = 0.75 and mean = 0.49, S.D. = 0.51), $t(86) = 2.61$, $p < .02$ and $t(86) = 1.97$, $p = .052$, respectively. These results provide support for hypothesis 1, indicating that participants exploited their counterparts more frequently when the instructions informed them that they had previously invested in creating their outside option than when that option had been costless, even if that investment was sunk and the option was now abandoned. There were no differences in the amount of time participants spent negotiating between conditions, $t < 1$.

Notably, the outside option was equally salient in applicants' minds prior to their negotiations with their counterparts, $t < 1$. Yet, when the option was costly rather than free, applicants reported feeling a greater sense of entitlement (mean = 5.50, S.D. = 0.74 vs. mean = 5.03, S.D. = 0.94), $t(86) = 2.59$, $p < .02$, and had higher aspirations for their outcome (mean = 9,500, S.D. = 2,090 vs. mean = 8,523, S.D. = 2,082), $t(86) = 2.17$, $p < .04$.

When examining how recruiters evaluated the applicants, however, we found no significant differences between conditions in the extent to which recruiters thought applicants lied, nor in the extent to which recruiters rated applicants as trustworthy (all $ps > .32$), suggesting that recruiters did not realize when applicants were behaving opportunistically toward them.

We then tested our full theoretical model by using a three-path mediation model, following the procedures recommended by Taylor, MacKinnon, and Tein (2008). The results are summarized in table 5. Consistent with our model, the extent to which applicants felt entitled significantly affected their aspirations, and the effect of our cost manipulation on aspirations was no longer statistically significant when entitlement was added to the model, as shown in columns 2 and 3. Next, we regressed the frequency of opportunism (i.e., the sum of instances of active and passive deception) on our cost manipulation and included entitlement and aspirations as mediators. As shown in columns 5 and 6, applicants' aspirations significantly predicted deception, and the direct effect of our cost-of-outside-option manipulation on deception was reduced when the mediators were included in the model.

As in Study 1, and consistent with the approach recommended by Taylor, MacKinnon, and Tein (2008), we used a bootstrap procedure to test the magnitude of our indirect effects. As reported in table 5, the 95% bias-corrected

Table 5. Summarized Results of Path Analysis, Study 3*

Measures	Feelings of entitlement		Aspirations		Opportunism (i.e., number of lies) [†]	
	(1)	(2)	(3)	(4)	(5)	(6)
Costly option	.54* (.21)	.46* (.21)	.19 (.19)	.78*** (.20)	.44** (.16)	.39* (.16)
Entitlement			.50*** (.10)		.62*** (.08)	.49*** (.09)
Aspirations						.25** (.09)
R^2	.07	.05	.29	.15	.50	.54
R^2			.23***		.35***	.04**
95% CI for the size of the indirect effect			.07, .55		.09, .60	.02, .30

* $p < .05$; ** $p < .01$; *** $p < .001$.

* All variables were standardized before running these regression analyses. Regression models are presented vertically; numbers across the top of the table in parentheses indicate different regression models, and the labels across the top of the table indicate the dependent measure for the regressions in the columns below. Entries in the columns are unstandardized regression coefficients, with standard errors in parentheses.

[†] The number of lies includes both sins of omission and sins of commission.

confidence interval for the size of each indirect effect excluded zero, indicating significant indirect effects (Shrout and Bolger, 2002; MacKinnon, Lockwood, and Williams, 2004). Together, these results support hypothesis 2.

Negotiation outcome. We examined whether opportunistic behavior by applicants with costly outside options resulted in worse outcomes for recruiters who negotiated with them, thus testing hypothesis 3. As predicted, recruiters obtained worse outcomes in the costly option condition (mean = 6,116, S.D. = 2,112) than in the free-option condition (mean = 7,489, S.D. = 1,714), $t(86) = -3.35$, $p = .001$. Unlike in Study 2, however, in Study 3 recruiters were not initially made aware of the costs incurred by their counterparts. Thus recruiters were not in a good position to predict the effects of sunk investments on their counterparts unless applicants happened to mention the costs they had incurred during the negotiation.

GENERAL DISCUSSION

Using both scenario and behavioral studies with monetary incentives across three different contexts, we demonstrated that power-enhancing investments in (eventually) discarded outside options increase opportunistic behavior in current exchange relationships. The results reveal that even when outside options aimed originally at increasing power are discarded, they are not quite forgotten, especially if they were costly. Studies 1 and 3 not only demonstrated the basic finding but also helped to identify the mechanism underlying the effect. The effect of costly options on opportunism is mediated by heightened feelings of entitlement that, in turn, result in higher aspirations. Furthermore, the results of Study 1 ruled out possible alternative explanations for the relationship between costly outside options and opportunism and showed that this link is not

explained by a change in how the relationship is construed, nor by a heightened valuation for the abandoned option.

Although a large amount of research has been devoted to understanding how the existence of power in the form of outside options may affect cognition, behavior, and outcomes—both of the focal party and of other parties—almost no attention has focused on how these outside options came into existence in the first place. That is, to date, though much is known about the consequences of *having* power in exchange relationships, little is known about the effects of *seeking* and *obtaining* power. We took an initial step toward understanding the psychological and behavioral consequences of the pursuit of power by focusing on the effects of investing in outside options to enhance one's relative power in an exchange relationship. Specifically, the current research examined the potential effects of costly (versus lower-cost or free) outside options on opportunism in exchange relationships. The results suggest that investments in outside options might constitute a barrier to relationship development even when the outside option turns out to be inferior and is foregone. This result is particularly important given that parties commonly invest in outside options in an attempt to improve their power, for example, when they look for ways to improve their alternatives in negotiations.

These findings have a variety of theoretical implications. First, the results contribute to research on power, a topic of longstanding interest in social psychology, organizational behavior, sociology, and management (e.g., Keltner, Gruenfeld, and Anderson, 2003; Galinsky et al., 2006; Fast et al., 2009) by pushing this work to consider the effects of pursuing power. Despite the insightful body of extant research on power, no previous study has attempted to empirically investigate the consequences of how parties seek power or to understand how the process of obtaining power will influence the feelings and behaviors of power seekers in exchange relationships. Power is often obtained in different ways in everyday life. In this paper, we focused on the investments individuals make to acquire power and their consequences for the power seeker's behavior toward others. In all three of the studies presented here, objective power was constant across conditions; what varied across conditions were the costs a party incurred in obtaining power. Such costs influenced that party's expectations and behavior. Specifically, our results show that when a person invests resources to acquire power, in terms of money or time, these investments translate into a sense of entitlement that, in turn, motivates higher aspirations in the current exchange relationship and opportunistic behavior in order to achieve them. By examining the psychological and behavioral consequences of the pursuit of power rather than of power itself, our research highlights the importance of moving beyond what happens when individuals have power to understand the ways in which seeking and obtaining power may influence exchange relationships.

Second, the results broaden our understanding of the effects of sunk strategic investments. Prior research has shown that sunk costs can lead to an escalation of commitment toward inferior alternatives. Escalation of commitment models (e.g., Staw, 1976) have suggested that initial investments beget future investments, even when there is negative feedback about the course of action being pursued (e.g., Staw, 1976; Staw and Ross, 1978; Bazerman, Beekun, and Schoorman, 1982; Schoorman, 1988). Although escalation behavior is determined by multiple factors (Whyte, 1986; Brockner, 1992), according to

most accounts of escalation behavior, it arises, fundamentally, from the inability to ignore sunk costs and the strong motivation to recoup them (Whyte, 1986; Brockner, 1992). Consistent with this observation, the current results show that even if inferior alternatives are avoided (i.e., even if people do *not* escalate commitment), the desire to recoup investments may persist and have negative effects on behavior toward a desired exchange partner by heightening the sense of entitlement experienced by the person who has the alternatives.

Third, the results pose a peculiar dilemma for building relationships in domains in which trust and power are both important factors. Trust has been defined as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau et al., 1998). Trust entails vulnerability because the other party may behave opportunistically (Williamson, 1975). In research on trust building, it has been argued that trust may be maximized when the other party has forsaken all others (Weber, Malhotra, and Murnighan, 2005). Quite problematically, however, the current results suggest that forsaking all others might, by increasing opportunism, minimize one's own trustworthiness. How interacting parties should resolve this dilemma is worthy of further exploration.

Finally, it is worth recalling a finding from Study 2 for which we did not generate any hypotheses: Player 1s sent the most money to Player 2s when Player 2s had the option of purchasing an outside option but chose not to do so. In other words, Player 1s sent more money when Player 2s were, in some sense, "weakest." This result is inconsistent with a large amount of research suggesting that outside options enhance power and, in turn, lead to better outcomes (e.g., Fisher and Ury, 1981; Sondak and Bazerman, 1991; Pinkley, Neale, and Bennett, 1994; Pinkley, 1995). On one hand, it is counterintuitive in light of empirical evidence suggesting that power can corrupt (e.g., Wade-Benzoni et al., 2008). For instance, power can lead negotiators to use information to their own advantage and to make more self-serving offers (e.g., Pillutla and Murnighan, 1995; Van Dijk and Vermunt, 2000). On the other hand, the finding is consistent with prior trust research (Pillutla, Malhotra, and Murnighan, 2003), which has found that those who trust fully (i.e., by taking maximal risk in exchange relationships) tend to send clearer signals of trust and to elicit greater reciprocity (e.g., Uzzi, 1997). In Study 2, those who decided to forego investments in outside options were visibly choosing not to hedge their risks. Notably, this behavior is also consistent with recent studies showing that individuals are more generous toward powerless (rather than powerful) opponents because a counterpart's lack of power may evoke feelings of social responsibility (e.g., Handgraaf et al., 2008). Future research aimed at clarifying whether and how choosing to forego power may be beneficial in trust contexts, even though it is costly in other strategic contexts, is warranted.

Our results also suggest a number of strategic implications for individuals and organizations. First, those who seek to establish relationships with exchange partners would benefit from considering the effect that seemingly foregone options might have on the expectations and behaviors of their strategic counterparts. In particular, exchange partners should be wary of the fact that prior investments aimed at enhancing leverage may lead to increased opportunism. Notably, when measurable (as in Studies 1 and 2), opportunism increased to a point that went well beyond what would compensate for the sunk costs the participants sustained. Furthermore, their willingness to

negotiate in good faith and reciprocate goodwill diminished significantly in the shadow of sunk investments. One possible solution may be for parties to both trust less and collaborate more cautiously in such contexts. Another solution might be to try to reshape the expectations of partner “shoppers” by making salient the irrelevance of the sunk costs associated with foregone alternatives. One caveat worth noting as we draw implications for relationships is that although Studies 2 and 3 were designed to simulate long-term relationships, all of our participants engaged in essentially a one-shot interaction in the laboratory.

Those who have invested in outside options might also wish to change their strategy. Although in Study 2, Player 2s benefited financially from being more opportunistic and reciprocating less, this behavior is likely to be damaging to trusted parties if it emerges in long-term relationships or when reputations are at stake, as in the type of contexts considered in Studies 1 and 3. If the effect of investing in outside options on opportunism is automatic or unconscious, as it is for many sunk-cost effects, those who invest in such options would benefit from being mindful of their psychological effects.

A number of issues remain unresolved. First, the degree of non-reciprocity in the costly option condition of Study 2—well beyond the point at which Player 1s had compensated for the sunk costs of Player 2s—needs further exploration. Second, it is worth considering conditions in which costly outside options might facilitate trust development. There are likely to be situations in which parties who undergo an extensive search for the best partner will be more confident that they picked the right one—and be more appreciative of the value this partner brings—than will those who expend fewer resources in evaluating alternatives. Thus the boundary conditions of the current findings require further study.

Third, future research should also examine the current effects in more embedded, long-term relationship contexts. When repeat interactions occur, exploitation may diminish, or it may take new forms that are more difficult to detect. Similarly, counterparts in long-term relationships may learn over time that they are being exploited, or they may simply acclimate to the (low) levels of appreciation, rewards, and respect they are given by the partner who finally picked them from among the many others they chased. Further research investigating these possibilities would deepen our understanding of the consequences of investing in outside options.

Finally, future work could examine other ways of seeking and obtaining power, and their consequences. Here, we focused on different levels of investments in outside options as ways to gain power in exchange relationships. In groups and organizations, power is obtained through other means, often through formal or informal processes. Investigating how these different ways of obtaining power may change the power holders’ attitudes and behavior across settings may provide important insights into this previously overlooked domain of study.

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APPENDIX: Full-text Version of the Scenarios Used in Study 1

You are the CEO of Company A and you have been in negotiations with the CEO of Company B for the last 7 months. The negotiations are regarding a possible information technology (IT) joint venture that could be very profitable for both companies. The total amount of value that the venture would create is uncertain, but both you and your counterpart (the CEO of Company B) estimate that the total (combined) value is likely to be close to \$30 million. Your final meeting with the CEO of Company B is scheduled for tomorrow. At this meeting, you will finalize the deal.

Throughout the negotiation, you have been the principal negotiator for Company A and your counterpart has been the principal negotiator for Company B. While both of you recognize that it is necessary to reach agreement in order to create the \$30 million in value, the two of you have also been arguing over some substantive aspects of the deal. How these aspects of the deal are negotiated—and the final structure of the overall agreement—will affect how much each company profits from the deal. Put another way, the outcome of the negotiations over the details will determine how the \$30 million of total value is divided between Company A and Company B. Both you and the CEO of Company B have reasons to argue for a large portion of the total value: you bring more of the technical expertise into this joint venture; Company B brings more of the financial resources.

If you are unable to reach an agreement with Company B regarding how the IT joint venture will be structured—and how the \$30 million in value will be divided between the two companies—you have the option of starting your own IT subsidiary. The value of this alternative is less than \$30 million. You estimate that if you create your own subsidiary, the total value to you will be \$5 million but none of this will have to be shared. (You don't have the option of doing both things—i.e., you cannot create a joint venture and also build a subsidiary.)

To the best of your knowledge, Company B does not have a similar alternative to doing a deal with you.

Only the *low-cost option* condition included the following final paragraph:

The only reason you have this alternative (of starting your own IT subsidiary) is that you invested \$1 million into initial start-up costs for the subsidiary 6 months ago. You did this because at that time it was unclear how much a joint venture could be worth—or even whether the joint venture was a possibility. Thus, you spent \$1 million in order to keep open the possibility of starting your own subsidiary in the future. If you had not invested the \$1 million then, you would not have this alternative now. (The \$1 million is already spent and will not be recovered regardless of which option you now choose.)

Only the *high-cost option* condition included the following final paragraph:

The only reason you have this alternative (of starting your own IT subsidiary) is that you invested \$3 million into initial start-up costs for the subsidiary 6 months ago. You did this because at that time it was unclear how much a joint venture could be worth—or even whether the joint venture was a possibility. Thus, you spent \$3 million in order to keep open the possibility of starting your own subsidiary in the future. If you had not invested the \$3 million then, you would not have this alternative now. (The \$3 million is already spent and will not be recovered regardless of which option you now choose.)

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