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Breaking Up is Hard to Do:
Irrational Overcommitment in an Industry Peer Network*

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Abstract

The paper puts a key claim of contemporary economic sociology and organization theory-- that the prevalence of strong ties among capitalists cannot be reduced to the utility of such ties-- on firmer theoretical and empirical footing. An important limitation in our ability to be confident in this claim is addressed: the reliance on an external standard of rationality, whereby irrationality is judged relative to an observer's judgment as to what an actor's interests should be. To address this limitation, we: (a) develop an internal standard for assessing irrational overcommitment, whereby an actor exhibits irrationality if he acts in a manner that is inconsistent with his own preferences; (b) clarify the mechanisms that produce such "akratic" overcommitment— short-term emotions that overwhelm rational calculation and a sense of loyalty that leads one to incorporate others' interests into one's own; and (c) present results from two studies of an industry peer network (IPN) in the remodeling construction industry, which test for akratic overcommitment and illuminate the mechanisms involved. Results from these studies indicate that there is significant akratic overcommitment to this IPN and that the key mechanism is the sense of loyalty that members feel towards their friends.

Interviewer 1:	So when you decided to leave, how difficult a decision was that?
IPN Member (IM):	It was very, very difficult.
Spouse of IM:	Very hard.
IM:	We decided a year ago. We went to two meetings in the meantime.
Spouse of IM:	We'd go and say … this is our last meeting, no matter what, our last meeting. Then as soon as we get there and we see everybody, well, maybe we should stay ….
Interviewer 2:	Why maybe? What were the maybes?
IM:	The history with the people.
Spouse of IM	Yeah, we really liked the people. We have strong relationships that seeing some of these people every six months was really, really nice.

Introduction

At the heart of contemporary organization theory and economic sociology lies the suggestion that the economy is shot through with linkages that are "stronger," more "social," or "embedded" than the arm's-length transactions familiar from neoclassical depictions of the market.[1] But what makes strong ties so widespread in the economy? The interpretation that underlies much of the growing attention by economists to such strong ties (e.g., Greif 1993; Baker, Gibbons, and Murphy 2002; Kranton and Minehart 2001; Rauch 2001) is that their pervasiveness is due to their utility. According to this perspective, *strong ties are instruments* used by economic actors to achieve ends that cannot be achieved through more fleeting linkages. Perhaps ironically, sociologists and organization theorists tend to agree that strong ties can be quite useful to economic actors (e.g., Baker 1990; Gulati and Garguilo 1999; Ingram and Roberts 2000; Uzzi 1996, 1997, 1999) and have even ventured predictions for when strong ties should be observed based on their utility (e.g., Baker 1984; DiMaggio and Louch 1998; Kollock 1994). In the same vein, Zuckerman and Sgourev (2006) have recently argued that economic actors join industry peer networks (IPNs), which are small, exclusive groups of "parallel peers" (non-competing firms in the same industry), due to the IPN's distinctive processes for facilitating learning and enhancing their members' motivation to achieve high performance.

[1] In general, these terms refer to linkages that exceed a baseline of relational intensity and frequency corresponding to transient, arm's length exchange (Granovetter 1985).

Yet this view of strong ties as instruments stands in apparent tension with a key reason that sociologists and organization theorists often give for their distinctiveness--that commitment to them is not reducible to the rational calculation of self-interest (e.g., Granovetter 1985, 1995; Powell, Koput, and Smith-Doerr 1996; Uzzi 1997; Lincoln, Gerlach, and Ahmadjian 1996). Uzzi (1997) provides perhaps the most compelling example of such irrationality (see also Lincoln et al. 1996; Li and Rowley 2002; Sorenson and Waguespack 2006). He relates a case of a textile manufacturer who gave advance notice to his suppliers with whom he had an "embedded" tie that he was planning on moving production overseas. Since those suppliers knew that they had no expectation of future business with the manufacturer, it would seem rational for them to cheat him. The manufacturer's willingness to risk such a response thus seems to violate his economic interests. Moreover, since he was moving overseas and the relationship was ending, doing favors for his suppliers also seems inconsistent with his non-economic interests. In short, the manufacturer's actions seem to reflect what we might term *irrational overcommitment* to his subcontractors. And insofar as such cases are common, they imply that the prevalence of strong ties among capitalists cannot be fully ascribed to their utility. Rather, a key reason such relationships are so widespread is that they tend to last beyond the point that they are useful.

The notion that actors do not end strong ties as soon as they cease being useful seems compelling, as it reflects the general asymmetry between beginning a line of action (e.g., assuming a role) and ending it. The literature on escalation of commitment has demonstrated (see e.g., Arkes and Blumer 1985; Brockner 1992) that actors who initiate a line of action out of self-interest often continue that line beyond the point that it satisfies their initial calculation of self-interest. A key reason for such escalation is that involvement in a line of action often induces actors to place "side bets" (Becker 1961; Schelling 1963) that (often unbeknownst to the actor) raise the costs of alternative lines of action.[2] Such costs obviously cannot apply before the line of action has commenced, thus creating an asymmetry whereby the factors that reinforce commitment do not have counterparts for inducing initial commitment. This asymmetry is reflected in Simmel's

[2] For instance, someone who decides to attend graduate school in sociology but would like to retain the option of switching to economics if he doesn't like sociology, may find that it is now harder for him to gain admission to economics programs.

(1950: 380) concept of "faithfulness," which he argued was characteristic of social relationships and defined as "a specific psychic state which insures the continuance of a relationship beyond the forces that first brought it about." Accordingly, Uzzi's case suggests that relationships that are founded on the basis of complementary economic interests *ex ante* are reinforced by a social orientation that shapes the relationship *ex post*.

Yet, while compelling, a significant obstacle limits acceptance of the idea that a predilection for irrational overcommitment is partly responsible for the prevalence of strong ties among capitalists. In particular, past research in this area employs a standard for rationality that, while useful, has critical limitations. Following Hollis (1987), it is useful to distinguish between *external* standards for rationality, which evaluate an actor's actions according to some standard that is independent of the actor's preferences; and *internal* standards, whereby the actor is judged irrational if she acts in a manner that is inconsistent with her preferences (cf., Weber's distinction between substantive and practical rationality; Kalberg 1980; Levine 1981). Past research on embedded relationships (as well as in the literature on the escalation of commitment) relies upon external standards of rationality-- in particular, the author's interpretation of the actors' economic interests. By contrast, internal standards of rationality predominate in contemporary psychology and philosophy due to the recognition that "a person is entitled to a wide range of opinions, beliefs, and preferences (Shafir and LeBoeuf 2002: 492)." Reliance on an external standard raises vexing questions: Should we regard a capitalist as irrational if she acts against her economic interests but in favor of her personal interests? And what if the capitalist acts for the benefit of her industry rather than her firm, perhaps in the "naïve" belief that all others will do the same? Clearly, we are on shaky ground if our standard for rationality requires that actors always agree with our construal of their "true" interests (cf., Warren 1990). Accordingly, Uzzi (1997: 56) concedes that the actions of the manufacturer and suppliers in his case are "irrational only in the narrow, economic sense," but that the actions are justifiable by the reasonable belief that altruistic actions further the collective interest, their own included". In sum, even systematic evidence of the behavior exhibited by Uzzi's manufacturer (e.g., Lincoln et al. 1996; Li and Rowley 2002; Sorenson and Waguespack 2006), provides only a limited warrant for concluding that relationships among capitalists are marked by irrational overcommitment.

But suppose we found systematic evidence of slightly different behavior. In particular, imagine that the manufacturer had reported that he would be better off not informing his embedded suppliers that he intended to move offshore, but subsequently (and despite no change in his preferences) he informed them anyway. Such action would not only violate an external standard of rationality (if that standard is based on economic self-interest, but not if it incorporated others' interests), but would also represent a clear violation of an internal standard of rationality, known as "weakness of the will" or *akrasia* (see Aristotle 2000: Book VII; Mele 1987; Rorty 1985). As Davidson (1980: 41) argues, such akratic behavior can be defended as rational only by rejecting the "principle of continence," which holds that an actor should "perform the action judged best [by that actor] on the basis of all possible reasons." Below, we operationalize this principle as follows: If an actor weighs all available information at time *t* and concludes that action *i* is preferable to action *j*, the actor can rationally justify opting for *j* at some later time *t+n* only if: (a) his preferences changed between *t* and *n*, perhaps due to the arrival of new information during that interval; or (b) some external constraint operated during the interval, thus preventing him from choosing *j*. But if *j* is selected without either (a) or (b) occurring, then the actor was *internally constrained* in a manner that cannot be defended without rejecting the principle of continence. It is hard to believe that the manufacturer, or many other people for that matter, would be willing to reject this principle and it is questionable whether such a rejection would even be meaningful (Davidson 1985).

Of course, there is no evidence that Uzzi's manufacturer defined his self-interest in this way. But there is good reason to suppose that such internal constraints, which make "breaking up… hard to do (Sedaka and Greenfield 1962),**"** are quite common. Consider the remarks of the married couple and partners in a U.S. remodeling construction firm, an interview with whom is excerpted in the epigraph. This couple had ended their membership in Business Networks (BN), an IPN in the remodeling construction industry (see below; Zuckerman and Sgourev 2006), and they reported that a year elapsed between the time they decided that membership in BN was no longer benefiting their business and when they finally exited. They explained that, when they tried to act on their decision to leave, they experienced great difficulty in severing their strong relationships. They presumably took these strong relationships into account when

they decided to leave, yet the relationships nonetheless constrained that decision. That is, their actions suggest a degree of irrational overcommitment according to an *internal* standard of rationality.

This case is hardly dispositive. To accept the idea that such irrational overcommitment helps explain the prevalence of strong relationships among capitalists, we require: (a) a clear internal standard for irrationality against which such cases can be assessed; (b) a better understanding of the mechanisms responsible for such irrationality; and (c) more systematic evidence that such irrational overcommitment is common. Accordingly, the remainder of the paper proceeds as follows. First, we develop our claim that irrational inconsistency or *akrasia* has distinctive advantages as an internal standard for irrational overcommitment, by clarifying this standard and showing how it can be operationalized empirically. Second, we argue that akratic overcommitment is a characteristic, though not universal, feature of social relationships; and that this is true even when the relationships are held by profit-seeking capitalists who initiated them for instrumental, self-interested purposes. We identify two mechanisms as responsible for akratic overcommitment, each of which can be discerned in the justifications given by the BN members quoted in the epigraph and in the survey of former BN members we discuss below: (a) short-term, positive emotions that may overwhelm rational calculation ("we really liked the people"); and (b) a sense of loyalty to others ("history with the people") that may lead one to incorporate others' interests into one's own. The next sections of the paper then present two studies of BN. The first exploits unique features of the BN setting and study design to afford a systematic test of akratic overcommitment by BN members. The second sheds light on the relevance of the two posited mechanisms responsible for akratic overcommitment. The final section concludes.

An Internal Standard for Irrational Overcommitment

To motivate and clarify our proposed internal standard for determining irrational overcommitment, consider two challenges to any claim that an actor has violated his preferences: (a) that the actor wanted to act in his self-interest but was prevented from doing so by factors out of her control; and (b) that the actor's preferences changed (perhaps due to the arrival of new information) since the time they were stated and the

action in question, thus resolving any inconsistency. Research on residential mobility demonstrates the salience of each of these challenges. According to Speare's (1974) rational model, the resident's overall level of satisfaction governs the decision whether to move residence, with such satisfaction a result of different components of the experience of residing in a particular home and neighborhood. Speare reasons that these factors affect satisfaction, but that they cannot directly affect mobility since that would imply that something other than the actor's satisfaction determined his action. Accordingly, Landale and Guest's (1985; cf., Bach and Smith 1977; Michelson 1977) finding, that certain key "structural factors" (if the resident is a homeowner; if residence exceeds five years) depress mobility independent of satisfaction with home and neighborhood, seems to reflect irrational overcommitment due to "ongoing webs of social relationships (p.218)." And yet, Landale and Guest concede that this conclusion is subject to the two challenges given above. They admit that: (a) external constraints might have made mobility difficult (pp. 202, 218); and (b) residents' preferences might have changed after being surveyed (perhaps because they confronted "practical problems" more seriously when confronted with "an actual move" [p.203]) such that their failure to move could be fully explained by an increase in their satisfaction with remaining in their residence (when compared to moving).

The first of these challenges poses a significant but surmountable problem for empirical verification. In particular, the researcher who wishes to interpret a pattern of action as reflecting irrational inconsistency must demonstrate, either through analysis or via study design, that the actors failed to follow through on their preferred course of action due to internal rather than external constraints. By contrast, the second challenge seems more serious. Insofar as an actor's preferences can always change between the time they are measured and the moment of action, it is unclear how a claim of irrational inconsistency could *ever* be verified. Moreover, if actions can be interpreted as "revealing" preferences, then inconsistencies between preference and action seem logically impossible (see Sen [1977] 1979; 1993). But what of our strong intuition that actions often contradict preferences? We require a principle that captures this intuition and can be operationalized empirically.

Davidson's principle of continence, which enjoins an actor to "perform the action judged best [by that actor] on the basis of all possible reasons Davidson (1980: 41)," is attractive in this regard. This principle does not pertain to the failure of preferences at *t* to explain action over some interval *t+n*. As discussed above, any such failure can always be explained away as due to (unobserved) change in preferences. Rather, an actor violates the principle of continence because certain of his preferences at time *t do in fact* explain his action in interval *t+n*-- but the preferences at *t* that explain future action are in some sense the *wrong preferences*; or more precisely, they are *weighed incorrectly*. To use a familiar example, one cannot accuse someone of irrational inconsistency if she decides to leave her intimate partner, but then regrets that decision at some later date. It is not irrational to change one's mind. But the failure to end the relationship *is* irrationally inconsistent (i.e., akratic) if such failure *can be predicted* based on a different weighting of the very factors that the actor considered and evaluated at the time of the decision-- e.g., the fact that she will now be single suddenly looms larger than it did before.

To operationalize Davidson's principle of continence as an internal standard against which to assess irrational overcommitment—i.e., akratic overcommitment, we propose the *principle of summary evaluation (PSE):*

> *An evaluation of an experience (e.g., living in a neighborhood, involvement in a relationship, participating in an IPN) should reflect all components of that experience known to, and evaluated by, the actor. The decision to continue or repeat that experience should be based on that summary evaluation, but not on the component evaluations.*

As illustrated in figure 1, the PSE does not imply that the summary evaluation at time *t* is the only factor that should affect the exit decision. Rather, there may be many factors or components of an experience that are unknown to an actor at time *t* (perhaps because they have yet to occur), and other factors of which the actor may be aware, but which she has yet to evaluate. Such factors should certainly (and rationally) affect the decision to repeat the experience once they become known and evaluated. However, insofar as the actor knows and evaluates certain components of the experience at time *t*, the actor should rationally incorporate such components in her overall evaluation of the experience.

Conversely, failure to incorporate such component evaluations into the summary evaluation at *t* means that the actor did not base her action on the best possible reasons. Put differently, while such component evaluations may have an indirect effect (mediated by the summary evaluation) on the decision to repeat the experience, a direct effect implies akratic overcommitment.

FIGURE 1 ABOUT HERE

Why is Breaking Up Hard To Do?

Having clarified a useful standard for irrational overcommitment based on an internal standard of rationality, we must now clarify why actors, and economic actors in particular, might display such akratic overcommitment. Clearly, breaking up is not always hard to do. But two mechanisms seem important in producing akratic overcommitment in many cases: (a) emotional attachment to the relationship; and (b) a sense of loyalty or duty to a friend. The first mechanism represents a classic form of *akrasia* (e.g., Mele 1987; O'Donoghue and Rabin 2005; Rorty 1985; Strotz 1955/6) in which the option chosen carries a short-term pleasure that seduces the actor from following through on her plans. An actor who has many strong ties (perhaps identified as "friendships") among members of a group but determines that such ties are not helping him achieve his goals (both pecuniary and non-pecuniary) must sacrifice the immediate satisfactions associated with such friendships for the longer-term benefits that he expects from alternative means of pursuing those goals. Rationally, it should be no sacrifice to give up short-term satisfactions for longer-term benefits. But insofar as positive emotions spill over from successful economic exchanges (Lawler 2002), and insofar as "emotions are involuntary, internal responses that simply 'happen to people' (Hochschild 1979; Lawler 2002: 349)" rather than being the product of deliberate, reasoned choices (see also Shafir and LeBoeuf 2002: 498-9), emotional attachments may override the decision to exit.

The second mechanism responsible for akratic overcommitment deserves particular attention because it paradoxically derives from rational action, albeit by an external standard. To see how a sense of loyalty or duty can be the basis for akratic overcommitment, note first that a virtue of Davidson's conception of *akrasia* (see Mele 1987 for a contrasting view) is that it recognizes that akratic actions can have morally

neutral foundations. Davidson (1980: 29) illustrates this point with a parable involving a person who has just crawled into bed after a tiring day, but who then realizes that he has neglected to brush his teeth. The person considers all possible reasons for getting out of bed to brush his teeth and determines that these reasons ("…my teeth are strong, and my age decay is slow. It won't matter much if I don't brush them [ibid.]") favor remaining in bed. And yet he gets up to brush his teeth because his "feeling that he ought to brush his teeth is too strong" for him to resist. Such behavior is akratic because it is governed by a consideration that the actor regards as unpersuasive. Yet this consideration is not a short-term pleasure but an evaluation of the actor's long-term interest.

We can take this point a step further, by noting that people often act against their better judgment in order to fulfill a substantive ideal-- i.e., to satisfy an external standard of rationality. Consider the familiar example of the assistant professor who "works too hard" at teaching at the expense of working on his research, thus damaging his chances at tenure. Such cases are akratic when the young scholars have difficulty resisting the "temptation" to invest heavily in teaching even when they believe they would be better off focusing on their research. These scholars are sidetracked by a substantive ideal to which the university publicly subscribes even while it effectively penalizes those who try too hard to fulfill this ideal. But since such substantive ideals compete with, and often trump, both self-interest and internal consistency in a culture's values, actors often find that they can easily "rationalize" (i.e., justify to themselves as well as others) akratic actions in the name of such ideals. *"Would you rather I help students learn or that I focus on my career?"* the professor might reasonably ask, and we would be hard-pressed to advocate for careerism.

Similar tensions operate on social relationships as well, where the conflict is between a sense of loyalty or duty to the other and self-interest. Consider our alternative version of the case of Uzzi's manufacturer. It would be akratic for the manufacturer to inform his suppliers of his intensions to leave. Yet such akrasia is easy to rationalize since it can be represented (to oneself as well as to interested audiences) as satisfying a more important value than either self-interest or internal consistency. *"Yes, you're right that I would be better off not informing them,"* the manufacturer might say, *"but would you rather that would mean betraying my friend!"* And insofar as it is difficult to accuse

an actor of irrationality when he thus satisfies an important external standard of rationality, akratic overcommitment thereby becomes more likely.

In sum, two mechanisms seem important as drivers of akratic overcommitment to social relationships: (a) emotional attachments that hinder an actor's ability to act in terms of (what she has determined as) her long-term self-interest; and (b) a belief (on the part of the actor and/or her audiences) that duty or loyalty to friends represents an ideal that may trump self-interest and internal consistency. Of course, the mere positing of such mechanisms does not mean that they are salient, and we may be particularly skeptical that they are salient for such economic actors as IPN members who enter into their relationships for instrumental reasons. Moreover, even if such mechanisms are salient, this does not necessarily mean that there is widespread violation of the PSE. Note in this regard that it is not even clear that the BN members excerpted in the epigraph represent a case of akratic overcommitment. In particular, it is possible that when deciding to exit BN, they ignored their feelings of attachment and/or their sense of loyalty to fellow members. In this sense, they may have been deceiving themselves, thereby underestimating the extent to which they were attached to their fellow BN members. But this does not mean that they violated the PSE. Accordingly, after describing the research setting of Business Networks (BN), we now turn to two related studies: (a) an analysis of attrition from BN, which uses unique data that afford a test for violation of the PSE; and (b) analysis of a survey of former BN members that provides insight into the mechanisms involved in akratic overcommitment.

The Setting: Business Networks

As discussed in greater detail by Zuckerman and Sgourev (2006), BN is a private company based near Eugene, Oregon that organizes groups or "networks" of small, private residential construction firms that focus either on home remodeling or disaster restoration. In the ten years we have studied BN, it has had between 160 and 200 members, grouped into networks of 6 to 14 members. Each member consists of one or two (often married) owners; up to two additional employees typically attend BN events. As at all IPNs, each BN network comprises firms are parallel peers in that they operate very similar business but compete in different (geographic) markets. Zuckerman and

Sgourev argue that IPNs appeal to members for two main reasons: (a) they provide unique opportunities to learn from peer firms; and (b) they have a distinctive capacity to motivate members to strive for higher performance. The results in table 1 (reproduced from table 1 of Zuckerman and Sgourev 2006: 1340-1), which gives answers to a 2002 survey question about the original reason for joining BN, shows that BN members cite both learning and motivation as critical to their participation in BN. With respect to learning, all respondents agreed (95% strongly so) that they had sought to "improve the performance of [their] company," and virtually all (99%) agreed (87% strongly) that they had desired to "obtain new knowledge and skills." And with respect to motivation, virtually every member reports that enhancement of his or her "commitment to improve [their] company's performance" is an important consideration in their decision to continue being a BN member and more than 90% ascribe importance to other members' commitment to performance.

But just as is true for the many "embedded" relationships and groups described in much of the recent economic sociology literature (e.g., Granovetter 1985; Uzzi 1996, 1997, 1999; Powell et al., 1996) IPNs are not simply arenas through which business information is discussed but quite intimate settings where members frequently engage one another on a personal as well as a business basis. The fact that BN members are small business owners, for whom the boundary between business and non-business roles is especially porous, facilitates the formation of multiplex relations. Many members cite a related reason that friendships form: the fact that they have relatively few alternative opportunities to meet others who engage roughly the same role-sets as they do-- i.e., with respect to employees, competitors, subcontractors, and family. This "loneliness at the top" creates a basis for mutual identification conducive to forming strong bonds. Moreover, BN meetings are leavened with dinners and outings to local points of interest in a way that helps to deepen and broaden the members' relations with one another.

It seems evident that such deepening often occurs. As one of the married co-owners of the former BN member excerpted in the epigraph remarked: "… there's the whole group dynamic when we're attending the meeting and the intensity of it and being together, you know, almost 24 hours a day for three days in a row, just promotes that sense of intimacy I guess that you can't get anywhere else." And the other co-owner

reported that they joined BN on a "business basis," it then "flipped to a personal basis." The pattern of "flipping" from business to personal seems quite common. Thus, we see in table 1 that while BN members tend to downplay the importance of friendship as the original consideration for joining (only 20% agree that they joined "to make new friends"), it seems to be a more important consideration for their continued participation (82% [41%] report that it is [very] important that they "get an opportunity to interact with friends)." In sum, while "friendship" is not necessarily a key dimension of attachment for all members of BN, it seems to become important for many. That is, members seem to escalate their commitment (Arkes and Blumer 1985; Brockner 1992) by making implicit side-bets in the form of friendships with fellow-members (Becker 1961; Schelling 1963). The questions before us are: (a) whether the commitments are strong enough to generate violations of the PSE; (b) whether such commitments can be accounted for in terms of the two mechanisms described above. We now describe results from two studies that help address these questions in turn.

Study 1: A Test of Akratic Overcommitment in Attrition from BN, 2003-2004

To recall, the assertion that an actor has acted akratically is typically subject to two challenges: (a) that the constraint was external rather than internal; and (b) that there was no internal inconsistency because the actor's action is consistent with his new preferences. Fortunately, the choice of BN as a research site addresses the first challenge, and our study design addresses the second. To see why BN is a useful setting for studying akratic overcommitment, contrast the BN member's decision to leave with a resident's decision to leave a home and neighborhood. While residents typically must make significant expenditures to *move*, the BN member incurs significant costs (financial as well as opportunity costs involved in attending and preparing for meetings; see Zuckerman and Sgourev 2006: 1339) by *remaining* in BN. Of course, such costs can be seen as minor if the member IPN perceives membership to provide significant benefits. But our focus in this paper is on cases in which the members doubt the value of membership. Insofar as those doubts are strong, the fact that members have an economic incentive to leave BN (due to the reduction in cost) means that the failure to act on those doubts reflect internal constraints rather than external constraints.

To address the second challenge, we focus not on whether respondents followed through on their decision to leave BN but on whether they violated the PSE in allowing a component of their BN experience (strong friendships) to lower their tendency to leave BN, net of their summary evaluation of their BN experience. As discussed above and as illustrated in figure 1, such direct effects indicate an akratic failure to "perform the action judged best [by that actor] on the basis of all possible reasons Davidson (1980: 41)." Data on when members joined and left BN (as well as other variables relating to BN membership and company financials) were obtained from BN. We conduct an event-history analysis of the time to exit using two "clocks:" (a) *Observation time* begins on the day that the firm joined BN (the earliest year of joining was 1986) and was thus first at risk of exit; and (b) *analysis time* begins either in July 2002, for those firms who had joined BN by June 2002, or in July 2003, for those firms who joined by June 2003. These dates were chosen because they represent the end of the periods during which BN members could fill out the web surveys we fielded between March and June of both 2002 and 2003 (see online supplement for the survey instrument). The dataset includes 218 firms and 357 firm-year spells. Respondents to the 2002 survey who remained in BN through June 2003 (and filled out the second survey) contribute two spells.[3] If the firm remained in BN through June 30th of the following year, the length of a spell was either the number of days from July 1 to June 30th of the following year; otherwise, the spell lasted until the firm announced its departure from BN. Since observation time begins upon entering BN, the analysis is not left-censored.

The PSE mandates that insofar as BN members' attrition rates can be predicted from the member's survey response, this should be true only for summary evaluations of the BN experience, but not for components of the BN experience that were evaluated on the same survey. The main survey item that captures the respondent's summary evaluation is the respondent's level of agreement (on a 5-point Likert scale) with the following statement: "I am satisfied with my membership in BN." The distribution of answers to this question is presented in table 2, together with the percentage from each answer category who exited in the following year. It seems clear that greater satisfaction

[3] Ten such firms failed to respond to the second survey. They contribute only one spell and are considered to have remained in BN in that spell. More generally, response rates were quite high for each survey (148 of 167 or 88.6% of BN members in 2002; and 167 of 190 or 87.9% in 2003).

is associated with lower attrition. And results from the proportional-hazards Cox models presented in table 4 confirm this impression.[4] As shown in model 1, an increase by one category of agreement that the respondent is satisfied with BN membership reduces the baseline hazard of exit on a given day is reduced by an estimated 61% (or 1.00-0.39).[5]

TABLES 2, 3, AND 4 ABOUT HERE

Yet while this summary evaluation predicts future attrition, results from model 6 show that the friendship-based component evaluation predicts future attrition net of the effect of the summary evaluation, thus representing a violation of the PSE. We derive this friendship component evaluation from one of three sociometric questions respondents were given on the survey. Each respondent was given a roster with the names of the members of their BN group and they were asked to note which members of their group, in the prior six months, had met one or more of the following three criteria: (a) they were a source of "help or advice in solving a difficult business problem"; (b) they were someone the respondent "interacted informally such as one would with a friend"; and/or (c) the respondent "looked to them as sources of motivation or inspiration." We regard the number of fellow-members listed by each criterion as an evaluation of this component of the BN experience. In particular, insofar as a respondent nominates many fellow members as friends, this indicates that the respondent places a high value on the friendship component of the BN experience. Table 3 gives the distribution (for 2002) of the number of fellow-members (top-coded at ten) listed by each criterion. We see that, consistent with their responses in table 1 and the fieldwork reported by Zuckerman and Sgourev (2006), BN members place the highest value on the learning component (captured by the "help or advice" criterion) of their BN experience. And we see from figure 2 that a higher valuation of each of these components of the BN experience is

[4] In this and subsequent models, the coefficients are a product of a baseline failure rate and a positive function independent of time, which incorporates the effects of covariates. The model assumes no functional form for the baseline function. The assumption that the effects of the covariates are constant over time needs to be tested empirically and any non-proportional effects of covariates included in the model if they are significant. The results of several tests suggested in the literature (see e.g., Yamaguchi 1991: 107) confirmed that the assumption of no interaction effects of covariates with time is not violated in this case. We adjusted the model to account for the clustering of errors within each network. Alternative model specifications ("stratified" and "shared-frailty" options in Stata) produced results that are substantially similar to the ones presented.

[5] The standard error reflected in the z-ratio reflects a 95% confidence interval that ranges from a hazard-ratio of 25% (75% reduction in the baseline hazard) and 57% (43% reduction).

positively associated with the summary evaluation. Note, however, that the association is lowest for friendship (r=.18; versus r=.26 for help/advice and r=.27 for motivation).[6]

FIGURE 2 ABOUT HERE

Yet while the friendship component-evaluation has the weakest association with the summary evaluation, results from the event history analysis in table 4 show that it has the strongest association with future attrition. We see from model 2 that the help/advice component evaluation is not significantly associated with exit. And while model 4 indicates that each additional motivation/inspiration nomination leads to an estimated decrease in the hazard of exit by just under 14%,[7] the estimate is not reliably different from zero when friendship is included in model 5. By contrast, the estimated decrease in the hazard with each nomination of a friend is 17%[8] in model 3, and this estimate remains largely unchanged when the other component evaluations are included in model 5. Note that we specify each of the component evaluations as splines (by including a dummy variable for whether they made no nominations) because, as indicated in table 3, the number of nominations is bimodally distributed. In addition to this technical reason for using a spline specification, there is a substantive reason: the fact that a respondent lists no one may not reflect dissatisfaction but that the criterion is not salient.[9] Accordingly, results from models 2-5 show that naming no one is associated with *lower* attrition from BN in the subsequent year, an effect that is significant in the case of friendship.

Thus far, we have seen that the friendship component evaluation has the weakest association with the summary evaluation, but the strongest association with actual exit from BN. This pattern of results is consistent with akratic overcommitment because it suggests that actors' commitment to BN is driven by a high valuation of their BN friendships, but they do not incorporate this component evaluation into their summary evaluation. Accordingly in model 6, we find direct evidence that BN members systematically violate the PSE. In particular, we see that the friendship component

[6] An multivariate ordinal logit, which included all available survey and financial variables that were significantly associated with satisfaction, confirmed that the motivation and help/advice component evaluations were significantly associated with satisfaction, but friendship was not.
[7] The 95% confidence interval ranges from a 25% to a 3% reduction in the hazard.
[8] The 95% confidence interval ranges from a 24% to a 9% reduction in the hazard.
[9] As one respondent to the alumni survey said: "I don't need anyone's help to be social." Such a respondent would presumably list no friends. But this would imply a rejection of friendship as a important component of the BN experience rather than a low evaluation of this component.

evaluation has a direct effect on the hazard of exit from BN independent of the summary evaluation. Note that the estimates of the hazard rates in this model are virtually the same as those in models 1 and 3, when these variables are entered separately. The estimated reduction in the hazard for each additional fellow member who is nominated as a friend (after the first nomination) is 15%[10] versus 17% in model 3. This indicates that the friendship-based component evaluation and the summary evaluation are largely orthogonal to one another, each operating in a distinctive way on BN members' (in)actions. Even though rational consistency mandates that respondents' valuation of their BN friendships should rationally be incorporated in their summary evaluations, the results from model 6 indicate that respondents' actions that they do not.

Additional Analyses and Robustness Checks. While we have shown systematic evidence for akratic overcommitment, it remains for us to substantiate the posited mechanisms responsible for such akrasia. But before doing so, we report on five sets of supplementary analyses conducted to better understand the processes involved and to check the robustness of our test for violation of the PSE.

The key results from the first and second sets of supplemental analyses are presented in model 7. First, we explored a wide range of financial and survey variables to see if they have significant effects on attrition. Given space constraints and to conserve degrees of freedom in this small sample, we include in model 7 the only variable to have a significant effect on attrition: prior-year's net profit (mean=0.59; SD=1.21). That more profitable firms are more likely to leave BN is consistent with the observation that more successful firms often begin to question the value of IPNs (see Zuckerman and Sgourev 2006: 1359). Yet we see that the effect of the friendship component evaluation is robust to the inclusion of net profit, as well as the inclusion of a second variable that reflects the second set of supplemental analyses-- the respondent's level of agreement with the statement that "I expect to leave BN in the next 12 months" (see table 5 for the distribution of this variable and its raw association with attrition). We include this variable,[11] to gain a bit more insight into the akratic behavior that we have found. In particular, while the behavior of BN members reflects a significant degree of

[10] The 95% confidence interval ranges from a 23% to a 5% reduction in the hazard.
[11] Results were weaker when responses to "I expect to leave BN in the next 3 years" was included instead.

akratic inconsistency, it is possible that BN anticipated that their level of satisfaction would be overridden by their sense of attachment to their friends, even against their better judgment. If so, there should no longer be a direct effect of the (friendship-based) component evaluation when this variable is included in the analysis. And yet, while this variable has a large effect (the hazard of exit rises by 64% with each increase of a level of agreement that one expects to leave in the next year), the friendship component evaluation continues to have a significant direct effect of virtually the same magnitude as before. In philosophical terms, this suggests that BN members' akratic overcommitment is facilitated by self-deception.[12]

TABLE 5 ABOUT HERE

The third set of supplementary analyses (not shown to save space, but available upon request) involved investigations of alternative specifications of the friendship component evaluation. We found that: (a) that the results are not driven by variation in respondents' general tendency to have many friends, as indicated by their response to the egocentric section of the survey; (b) results tend to be slightly weaker, but substantially the same as those in table 4, when the proportion--rather than the absolute number--of fellow group members is used to indicate a higher component evaluation; and (c) that alternative specifications that take into account overlap among the three component evaluations do not change the results. We interpret these results as indicating that: (a) the akratic overcommitment is driven by a sense of attachment to one's BN group rather than some more general attachment; (b) this sense of attachment should be assessed relative to a member's personal baseline rather than a group standard; and (c) that this sense of attachment is effectively orthogonal to the dimensions of appeal that are more important in first attracting a member to BN.

In the fourth set of supplementary analyses (not shown to save space, but available upon request), we considered alternative specifications of the summary

[12] Whereas the inconsistency involved in akrasia pertains to an actor's preferences, the inconsistency at the heart of self-deception involves an actor's beliefs. In Davidson's terms (1985: 81-85), self-deception has two components: (a) "weakness of the warrant," whereby an actor believes *p* to be true even if the weight of the evidence at her disposal (or even deductive logic; Pears 1985) points to *not-p*; and (b) "wishful thinking," whereby the actor strongly desires to believe *p*. Thus, self-deception is a case where wishful thinking is so strong that it induces weakness of the warrant. In the current case, BN members apparently wish to believe that they will not be akratically overcommitted and that wish leads them to a higher estimate of their predilection for attrition than is implied by their own friendship component evaluation.

evaluation. One set of robustness checks involved using alternative specifications of the summary evaluation to see whether one could increase its predictive power and/or eliminate the direct effect of the friendship component evaluation. In particular, and given the skewness in the distribution shown in table 2, we tried various combinations of dummy variables based on the response categories, but these alternative specifications did not change the results. We also included three additional satisfaction questions that were in the same battery of questions as the general satisfaction question used in table 4: the respondent's level of agreement that (a) the respondent's firm's "performance is benefiting from BN membership;" (b) "From BN, I am gaining friendship and social support"; (c) "would endorse BN to nonmembers;" These variables were each considered as alternatives to the general satisfaction question and as elements in a factor score constructed from all four satisfaction variables.[13] This analysis indicates that a single factor is responsible for most of the variation across these items and that the factor is aptly described as a measure of "membership satisfaction". All four factor loadings exceed the 0.6 level usually taken as a cut-off point. However, when the factor score is introduced in the regression equation, its predictive power is weaker than that of the general satisfaction variable used in table 4. The effect of the general satisfaction variable was also greater than that of any of the alternatives, with only the first and third variables having significant effects on attrition. Overall, these results indicate that the general satisfaction variable is a good indicator of the respondent's summary evaluation.

The insignificant effect on attrition of the "friendship and social support" variable gives a reason to be cautious in concluding that respondents' friendships lead them to be akratically overcommitted to BN. That is, it could be that this variable is a good indicator of the respondents' friendship component evaluation and there is thus no evidence of akrasia. We think such a conclusion is unwarranted for three reasons. First, it does not explain why we see clear evidence of akrasia when the friendship nominations are used as the basis for the component evaluation. And it is straightforward to see respondents who list more BN members as friends as giving this component of their BN experience a higher evaluation. Second, a problem with the "friendship and social support" variable is

[13] We use exploratory factor analysis because: (a) we do not have strong theoretical priors regarding the factor structure of the data; (b) our primary interest is in finding the combination that best operates as a baseline against which to gauge the effect of the friendship component evaluation on attrition.

that it comes after the general satisfaction and "economic performance" questions and are likely biased by them. Two possible sources of bias are: (a) the component evaluation is more likely to be incorporated into a summary evaluation when the former comes after the latter; and (b) given the general tendency for BN members to downplay friendship as a reason for participating in BN, some BN members might downplay the importance of friendship and social support when it is framed against economic performance (the prior question) or if it is asked about in an explicit way (i.e., inferring it from the number of friends named). Finally, rather than showing that there is no akratic overcommitment, the insignificant effect of the "friendship and social support" variable suggests that one of the two posited mechanisms for akratic overcommitment may be relatively unimportant. In particular, this question (unfortunately) asks about friendship together with social support, which corresponds to the first of the two mechanisms (emotional attachment) rather than the second (loyalty).[14] As discussed shortly, our second study further suggests that the key mechanism is a sense of loyalty to members' friends.

The final supplementary analysis pertains to a potential complication in interpreting the results in table 4. In particular, the action in question is one that does not have a temporally clear action implication: it is not clear when the dissatisfied person has stayed too long, especially since things can change post the time of the interview. In fact, the PSE can be evaluated only in terms of variation-- i.e., the greater one's summary evaluation, the more likely one is to leave later, and this association should account for any association between the component evaluation and future attrition. That is, there is a sense in which it is difficult to ascertain when a particular person has violated the PSE, while it is possible to tell when the members of population generally tend to violate it. That being said, it would be awkward if it turned out that our results were being driven by the generally satisfied BN members (who stayed in BN even longer than they might otherwise). Our supplementary analysis provides reassurance in this regard. We examined the small subsample of 18 respondents who said they agreed that they expected to leave BN within 12 months and found that the nine who did not leave nominated more

[14] Both here and in the alumni survey to be discussed shortly, we measure the first mechanism with the term "social support" since fieldwork at BN suggested that BN members often express their attachment to BN in these terms. For instance, one member interviewed during the fieldwork credited his participation in BN with saving both his business and his marriage summarized the benefit received from BN by saying that "I crave and need the social support."

friends (mean=4.66; SD=4.92) than the nine who followed through on their expectation of leaving (mean=4.00; SD=3.24). This difference of 17% is substantively significant, though not statistically significant (t=0.34) due to the small size of this subsample.

Study 2: 2007 BN Alumni Study

While the preceding analysis provides evidence for akratic overcommitment among BN members, it provides relatively little insight into the mechanisms that might have produced such overcommitment. To gain a better understanding of such mechanisms, we we invited all 82 BN members who left BN from July 2004 to July 2007 to fill out a survey regarding their decision to leave BN. To maximize response rate (no incentive for completing the survey was provided other than the promise of an article about BN), the survey was very short, with questions that focused on: (a) the time it took them to leave BN; (b) the reasons for their departure; (c) and their opinions about BN and their experience with the process of exiting BN. A copy of the survey is included in the online supplement to this article. The survey was completed by 27 former members. After removing 4 BN alumni whose email addresses we could not track down, this constitutes a response rate of 34.6%.

In interpreting results from the survey, it is useful to note two reasons not to expect respondents to report akratic overcommitment. First, respondents should presumably display standard retrospective biases, which incline individuals to cast their past behavior in the best possible light. Second, respondents who were embarrassed by irrational behavior could have opted not to fill out the survey. And yet, respondents tended to describe the process of leaving BN in quite akratic terms; and they seemed unapologetic about such akrasia because they tended to frame their difficulties in leaving BN as driven by the second of the two mechanisms. That is, loyalty to friends rationalizes the akratic overcommitment.

The survey results contain three sets of findings that pertain to the questions at hand. First, each of the two posited mechanisms seems important, at least in the minds of survey respondents. Respondents expressed high level of agreement (64%, with 36% strongly agreeing only 21% disagreeing) with the statement that “Leaving BN was difficult for me.” Those who did not disagree with this statement were then asked for

their level of agreement with two statements designed to tap each of the two mechanisms. Virtually all of the eligible respondents agreed both that "The social support I received from fellow BN members made it difficult for me to leave." (16 of 18 agreed, with two neutral and one missing response) and that and "The loyalty I felt toward fellow BN members made it difficult for me to leave." (18 of 19, with 1 neutral). Note that while respondents to the alumni survey were also given the option of explaining in their own words why they found it difficult to leave BN, very few did so. This suggests that the items tapping "loyalty" and "social support" capture the main reasons respondents think it was hard for them to leave BN.

The second key finding from the survey is that loyalty appears to be the more important mechanism. Four sets of results support this conclusion. First, while virtually all respondents who said they had difficulty leaving BN thought that both mechanisms were important, they were significantly (Wilcoxon signed rank Z-score of 2.060; two-tailed p=.039) more likely to express strong agreement that loyalty was important (11 of the 16 who agreed) than social support (6 of the 16). Second, while those who cited loyalty were more likely to strongly agree (relative to lower levels of agreement) that they had difficulty leaving BN (Z=3.38), there was no discernible difference (Z=0.67) with respect to social support. And the third reason for ascribing greater importance to the loyalty mechanism pertains to an item that asked respondents whether they agreed that "My company stayed in BN longer than it should have." Strikingly, 33% of respondents agreed with this direct concession of failure to act in their self-interest. A perhaps more striking result is that respondents were *less likely* to agree that they had stayed too long if they reported *more difficulty* in leaving BN and/or *emphasized loyalty* as the reason for such difficulty. While 50% of the 8 respondents who said they had no difficulty leaving BN agreed that they had stayed too long; this was true of only 26% of the 19 who agreed that they had difficulty leaving, and only 18% of the 11 respondents who strongly agreed that loyalty was an important factor.[15] This pattern supports our interpretation that a sense of loyalty makes akratic overcommitment more likely because

[15] It is difficult to say whether these results are statistically significant because it is not clear what the null hypothesis is. Arguably, the null is that respondents who experienced the most difficulty leaving are the most likely to agree that they had stayed too long in BN. With such a null, the opposite association would likely be highly significant even in this small sample.

it rationalizes akrasia through appeal to a substantive ideal. And given such rationalization, there is no reason for BN members to regret the akrasia.

The final set of results from the alumni survey both reinforces the importance of the loyalty mechanism and speaks to the question of whether attrition from BN truly involves violation of the PSE. Respondents were asked to estimate two time-lags: (a) from "beginning to consider leaving BN" and "deciding to leave"; and (b) between "deciding to leave" and "formally ending membership." Respondents reported that the first time-lag took a considerable amount of time (mode='More than 1 year'; mean and median= '6 to 12 months'). The second time-lag speaks more directly to violations of the PSE. Rationally, there should be no lag between the decision to repeat an experience (i.e., summary evaluation) and the execution of that experience. And in fact, the modal response (25% of respondents) was a gap of less than one month. But the mean and median response was a gap of "1 to 3 months" *with more than a third saying that it took them more than 6 months (with 12% saying 1 year and 12% more than 1 year) between the time that they decided to leave and when they actually left.* Finally, both sets of time-lags, and especially the second lag, were associated with the tendency to express stronger agreement with "loyalty" as opposed to "social support" as a reason for difficulty in leaving BN. In particular, whereas all eight of the respondents who expressed difficulty leaving and took three or fewer months to execute their decision were equally likely to cite 'loyalty' as 'support', four of the eight who took more than 3 months cited loyalty over friendship, with the other four citing support and friendship in equal amounts.

Discussion

To recall, the main objective of our analysis is to put a key claim -- that the prevalence of strong ties among capitalists cannot be reduced to the utility of such ties-- on firmer theoretical and empirical footing. Even when capitalists initiate such relationships for self-interested, economic reasons, their commitment often escalates due to the (often anticipation) addition of "social" elements that make it difficult to sever a relationship as soon as it is in their economic self-interest to do so. Uzzi's (1997) case of the manufacturer who gave his suppliers advanced warning of his plans to move offshore exemplifies such irrational overcommitment, as such behavior does not seem to satisfy

either his pecuniary or his non-pecuniary interests. Yet while this case and supporting research (see especially Granovetter 1985, 1995; Lincoln et al. 1996; Powell et al. 1996; Uzzi 1996, 1999) are compelling, the basis for seeing irrational overcommitment as an important reason for the prevalence of social relationships among capitalists has been limited due to two factors (cf., Uzzi 1997: 56): (a) the lack of systematic, real-world evidence for such overcommitment; and (b) the reliance on a conception of rationality based on an external standard of rationality. We have endeavored to address these gaps in three ways: (i) by developing a clear, operationalizable *internal* standard for testing irrational overcommitment, which was based in Davidson's (1985) definition of *akrasia*; (ii) by clarifying the mechanisms that make it likely that we will observe akratic overcommitment in social relationships; and (iii) by analyzing data on members of an IPN that provide a test for akratic overcommitment and shed light on the mechanisms involved. To put these contributions in context, we first note the limitations of our analysis and then situate our approach in the context of the literature on social relationships among capitalists.

Limitations. We note three limitations of our analysis. First, we have seen that our key result-- i.e., that BN members fail to incorporate the valuation of their friendships into their summary evaluation of BN membership, thereby leading them to remain in remain in BN longer than their summary evaluation would imply-- is sensitive to the measure used for the member's valuation of his friendships. In particular, akratic overcommitment is evident when the friendship component evaluation is measured as a function of the number of friends nominated prior to the summary evaluation, but not when an explicit evaluation is made subsequent to the summary evaluation and when the evaluation involves "social support." Unfortunately, the data at our disposal do not allow us to determine which of these differences in the measures is most important for accounting for the difference in results.

Second, our analysis pertains only to BN and then only to survey respondents. Indeed, if nonrespondents in study 1 were more likely to leave BN, it would seem likely that they were less akratic than were respondents. This concern does not seem to have significant merit. First, the response rate to the surveys used for study 1 was very high. Second, since we have data on when both respondents and nonrespondents joined and

exited, we can compare the attrition rates for the two groups. This analysis shows that nonrespondents to the 2002 survey were indeed more likely than respondents to exit BN in the following year (26.32% nonrespondents vs. 8.78% of respondents; t=2.34; p=.02). Yet this difference was not significant for 2003 (17.39% vs. 13.17%; t=0.55; p=0.29); and the 2002 difference declined markedly when seven cases from a pre-test group were included (23.81% vs. 10.3%; t=1.80; p=.07). Finally, in additional proportional-hazards models (not shown), the effect on the hazard of exit made by whether a BN member was a respondent or nonrespondent was marginally significant (p=.09). In sum, while our estimate of akratic commitment at BN likely may be biased slightly by our failure to get responses from all members, this bias does not seem substantial. At the same time, results from study 2 must be tempered by the fact that we received a response rate of only 35%. And while our analysis provides the first systematic evidence of akratic overcommitment among the hundreds of members of BN, it is impossible to say whether similar analyses performed on other relationships or groups would produce similar results. The generality of our results can be known only with the help of additional research.

Clarifying the Contribution. In developing the idea that akratic overcommitment makes strong ties among capitalists more prevalent than they would otherwise be, we do not mean to imply that the use of external standards of rationality in past research on "embeddedness" are without value. To the contrary. It is reasonable regard the tendency for strong ties to lead capitalists act against their economic interests as more notable than the tendency for such attachments to lead capitalists to act against their own judgment that the ties should be dropped. Besides being the main way that capitalists are judged in our culture, a more general reason to favor an external standard of rationality such as the second one is that it addresses the key weakness of internal standards of rationality: their failure to deem irrational "utterly improvident action" such as suicide (Hollis 1987: 85). It is problematic to view someone as rational so long as she is rationally consistent if this means that it is rational for her to hurt herself or her interests, and especially if she later comes to recognize such interests as her own (accordingly, we deter others from committing suicide at least in part because we expect them to thank us later). At the same time, we pointed out above why it is problematic to rely on external standards: who

are we to say what are an actor's "true interests"? In particular, if Uzzi's manufacturer acts on the basis of a broader interest than his narrow, economic self-interest, it seems awkward to call him irrational-- especially if this approach turns out well for him economically.

These examples illustrate that, in assessing irrational overcommitment and more generally, it is fruitless to rely solely on either internal or external standards of rationality. Each captures an important aspect of what it means for an actor to be rational, as reflected in Weber's distinction between substantive and practical rationality (see Kalberg 1980; Levine 1981).[16] Thus, while external standards of rationality should continue to command attention, there are important reasons to supplement such research with a focus on internal standards.

Accordingly, we conclude by noting a key lesson and key implication that derives from our focus in the present analysis on an internal standard of rationality. First, we argue and provide supporting evidence that akratic overcommitment to a relationship is often justified (to oneself and others) as satisfying the substantive ideal of loyalty—i.e., an external standard of rationality. Insofar as certain values are valued more highly than is internal consistency in following through on the course of action judged best, actors can *rationalize inconsistency* in terms of those, thus making akrasia more likely. That is, the very existence of internal and external standards of rationality, coupled with the recognition that actors often face multiple, conflicting external standards of rationality makes irrationality by some standard more likely. Thus one way of interpreting our main finding is that actors often must choose between two ways of rationalizing their behavior-- via loyalty or economic self-interest-- and they often choose the former, even if it means being irrationally inconsistent as well.

This way of framing the matter leads us to our final lesson. In particular, insofar as capitalists tend to determine their self-interest in terms of their economic interests, violation of the internal standard also implies violation of this key external standard for judging their behavior. That is, while tests of irrationality based on internal consistency

[16] Note that Simon (e.g., [1976] 1979) uses the term "substantive rationality" in a way that is at odds with standard usage in sociology, which derives from Weber's notion of *vertrationalitat*. In particular, Simon defines substantive rationality in terms of optimization of means to ends, and distinguishes it from "procedural rationality," which involves reasonable processes for achieving such ends when optimization is impossible.

and economic self-interest sometimes lead to different results (e.g., suicide; "false consciousness" among the working class [Warren 1990]), they do not contradict each other in the present case. Thus, in the alternative scenario involving Uzzi's manufacturer, his behavior fails by *both* an external standard based on his economic self-interest (as in the actual scenario) and an internal standard (because, in the alternative secenario, he construed his interests in terms of his economic self-interest). Similarly, insofar as BN members' summary evaluation of BN membership derives from their economic self-interest, their attrition patterns suggest *both* akratic overcommitment on their parts *and* a violation of their economic self-interest. In this sense, by focusing on an internal standard of rationality, we have arrived at results that bear importantly on whether capitalists violate their economic interests in remaining committed to their strong ties. That is, our findings provide the first systematic evidence that the prevalence of social relationships is due to irrational overcommitment, by either an internal or an external standard of rationality.

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Table 1a.
BN Members' Rationale For Participating, 2002 Survey (N=148)

	Proportion Answering				
.. Importance of the following… in your decision to join BN at the time that you originally joined.	S.D.	Disag-ree	Neutral	Agree	S. A
Desire to obtain new knowledge and skills	0.00	0.00	0.67	12.08	87.25
Desire to make new friends	2.68	17.68	47.65	16.78	2.68
Desire to improve organization in your professional life.	0.00	1.34	5.37	28.19	65.10
Desire to get accountability before a group.	4.70	4.70	30.20	32.89	27.52
Desire to improve the performance of your company.	0.00	0.00	0.00	5.37	94.63
Desire to have clearer performance benchmarks.	0.00	2.01	8.05	32.89	57.05
Endorsement by someone you trust.	3.33	5.41	25.00	42.57	23.65

Table 1b.
BN Members' Rationale For Continuing Membership, 2002 Survey (N=148)

	Proportion Answering			
.. in continuing to be a BN member, how important is it that...?	Not at all	Not very	Some-what	Very
Your company's performance improve?	0.68	2.72	27.89	68.71
You get an opportunity to interact with friends?	1.36	17.01	40.82	40.82
The costs of membership fees remain the same?	0.69	7.59	51.03	40.69
Your commitment to improve your company's performance be enhanced?	0.68	0.00	25.34	73.97
You obtain new knowledge and skills?	0.00	0.00	12.93	87.07
BN members to whom you feel close to might leave the network?	0.68	29.45	46.58	23.29
Other members be committed to improving their company's performance?	0.68	1.36	31.97	65.99
Membership gives you a greater sense of accountability?	2.72	4.76	41.50	51.02

Table 2. Ordinal Logit Analysis of Agreement with the Statement "I am Satisfied with my Membership in Business Networks"*

	2002 Survey				Pooled: 2002 & 2003	
	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**
Number of Nominations						
Help/Advice	0.135●●			0.081	0.093●	0.071
	(.053)			(0.055)	(0.047)	(0.049)
Friendship		0.105●		0.024	0.019	-0.011
		(.060)		(0.068)	(0.037)	(0.034)
Motivation/			0.176●	0.083	0.124●	0.172●●●
Inspiration			(.084)	(0.105)	(0.058)	(0.064)
Zero Nominations Dummy						
Help/Advice	-0.08					
	(0.470)					
Friendship		0.051				
		(0.043)				
Motivation/			0.173			
Inspiration			(0.526)			
Firm size (Logged Sales)						0.436●●●
						(0.121)
Cutpoint 1	-4.42 (1.09)	-4.61 (1.04)	-4.52 (1.02)	-4.37 (1.08)	-5.00 (1.03)	1.15 (2.34)
Cutpoint 2	-3.03 (1.11)	-3.50 (1.06)	-3.40 (1.04)	-3.25 (1.10)	-3.19 (0.60)	2.98 (1.97)
Cutpoint 3	-0.77 (0.34)	-0.98 (0.42)	-0.87 (0.30)	-0.71 (0.35)	-0.77 (0.19)	5.42 (1.69)
Cutpoint 4	1.65 (0.34)	1.41 (0.30)	1.55 (0.46)	1.73 (0.37)	1.82 (0.28)	8.09 (1.77)
N	148	148	148	148	315	315
-2* Log-likelihood	317.04	320.16	317.09	315.10	643.26	632.13

● p< .10 ●● p<.05 ●●● p< .01

* Numbers in parentheses are robust standard errors, adjusted for clustering by the BN group

Table 3.
Distribution of Nominations of Fellow BN Group Members For Three Criteria for Relationship, 2002 Survey (N=148)

Number of Nominations Made	Percent Who Made the Given Number of Nominations According to Each Criterion:		
	Help/Advice	*Friendship*	*Motivation/Inspiration*
0	8.78%	19.59%	25.68%
1	7.43%	10.81%	18.24%
2	12.16%	10.81%	9.46%
3	13.51%	11.49%	5.41%
4	10.14%	8.78%	14.86%
5	5.41%	8.11%	6.76%
6	11.49%	3.38%	7.43%
7	12.84%	6.08%	3.38%
8	4.73%	6.08%	3.38%
9	3.31%	6.08%	4.05%
10 or more	10.14%	8.78%	1.36%
Mean Nominations	4.81	4.02*	2.93*
Mean (excluding those who nominated none)†	5.27 (n=135)	5.01 (n=119)	3.94* (n=110)

* Different from mean help/advice nominations at $p<.05$ level, according to t-test.

† Since the subsamples are slightly different, the t-test must be performed on a subsample that includes only those respondents who nominated more than one fellow-member on both of the criteria being tested. For the first comparison, the subsample includes 114 respondents and the mean number nominated is 5.53 for help/advice and 5.11 for friendship. For the second comparison, the subsample includes 105 members and the mean number nominated is 5.63 for friendship and 4.04 for motivation/inspiration.

Table 4: Exit from BN By Summary Evaluation of Satifaction with BN

Agree that "I am Satisfied with my Membership in Business Networks"?	N (2002 Survey)	Percent Who Had Exited By June 2003	N (2003 Survey)	Percent Who Had Exited By June 2003
Strongly Disagree	1	100.00%	0	
Disagree	2	50.00%	3	66.67%
Neutral	27	18.52%	21	14.29%
Agree	77	7.79%	89	15.73%
Strongly Agree	41	0.00%	54	5.56%
Overall	148	8.78%	167	13.17%

Table 5. Summary Statistics and Correlations Among Variables Used in the Analysis of Exit from Business Networks, 2002-2004

	Summary Evaluation	Mean (SD)	1	2	3	4	5	6	7	8
1	5-Point Scale Agreement that Satisfied with BN	4.11 (0.73)	*							
	Component Evaluations									
	Number of Nominations									
2	Help/Advice	4.76 (3.44)	0.26	*						
3	Friendship	3.98 (3.63)	0.18	0.42	*					
4	Motivation/Inspiration	2.99 (2.87)	0.27	0.53	0.57	*				
	Zero Nominations Dummy									
5	Help/Advice	0.10 (0.30)	-0.08	-0.43	-0.29	-0.28	*			
6	Friendship	0.21 (0.41)	-0.07	-0.33	-0.58	-0.41	0.41	*		
7	Motivation/Inspiration	0.24 (0.43)	-0.14	-0.34	-0.47	-0.61	0.39	0.59	*	
8	5-Point Scale Agreement Expect to Exit BN in 12 Mo.	1.97 (0.93)	-0.57	-0.15	-0.13	-0.22	0.11	0.06	0.12	*
9	Net Profit	0.59 (1.21)	0.07	0.09	-0.03	-0.03	0.05	0.05	0.07	-0.11

Table 6.
Cox Proportional-Hazards Model of Exit from Business Networks, 2002-2004*

	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**	**Model 6**	**Model 7**
Summary Evaluation 5-Point Scale Agreement that Satisfied with BN	0.390●●● (-4.83)					0.399●●● (-4.83)	0.585●● (-2.10)
Component Evaluations ***Number of Nominations***							
Help/Advice		0.928 (-1.45)			0.980 (-0.41)		
Friendship			0.844●●● (-3.25)		0.868●● (-1.97)	0.871●●● (-2.31)	0.863●●● (-2.56)
Motivation/ Inspiration				0.857●● (-3.25)	0.915 (-1.12)		
Zero Nominations Dummy							
Help/Advice		0.553 (-0.94)			0.685 (-0.58)		
Friendship			0.370●●● (-2.92)		0.399●● (-2.39)	0.359●●● (-3.17)	0.363●●● (-3.73)
Motivation/ Inspiration				0.603 (-1.23)	0.781 (-0.52)		
5-Point Scale Agreement Expect to Exit BN in 12 Mo.							1.642●● (2.20)
Net Profit							0.083● (0.123)
Events	37	37	37	37	37	37	37
Spells	315	315	315	315	315	315	315
Wald χ^2	23.32	2.38	14.92	6.16	36.51	43.10	90.72
-2*Log Likelihood	387.85	405.54	399.34	403.69	397.94	382.14	373.15

● p< .10 ●● p<.05 ●●● p< .01

* Coefficents are hazard ratios and the numbers in parentheses are z-ratios. These z-ratios are based on robust standard errors, with clustering by BN group.

Figure 1: Venn Diagram Illustrating Akratic Overcommitment as a Violation of Standard 2

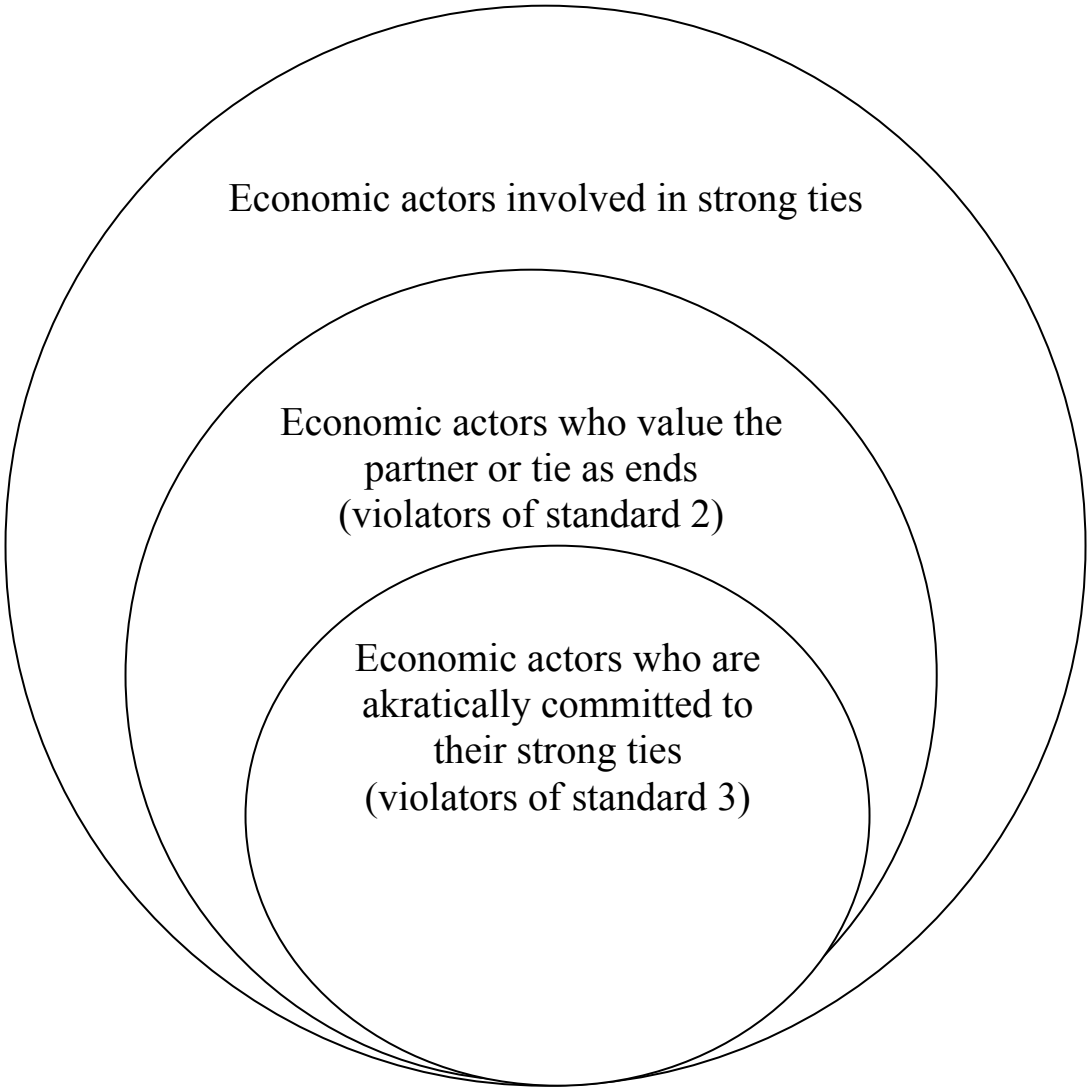


Figure 2: Akratic Overcommitment Based on the Principle of Summary Evaluation

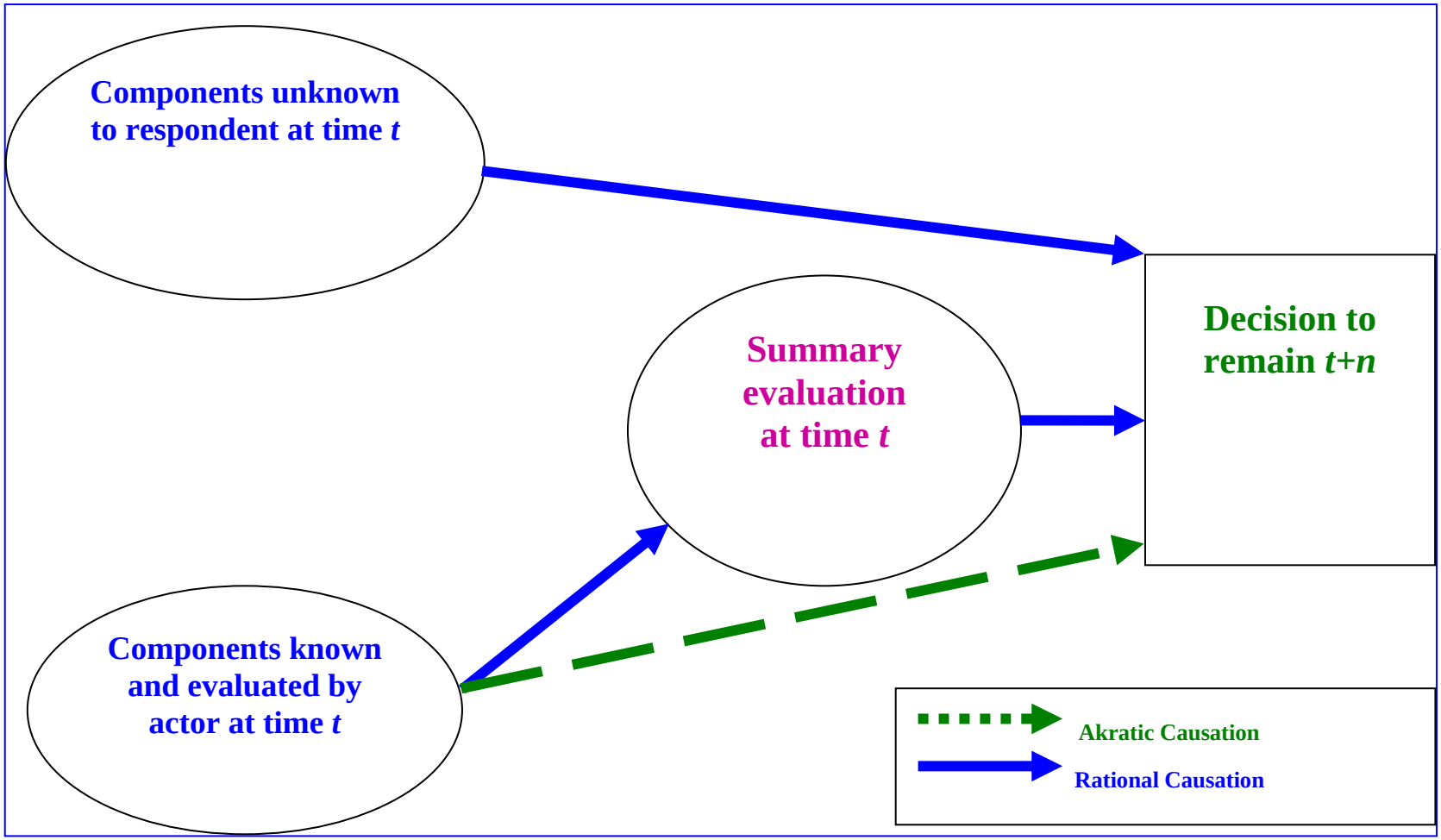
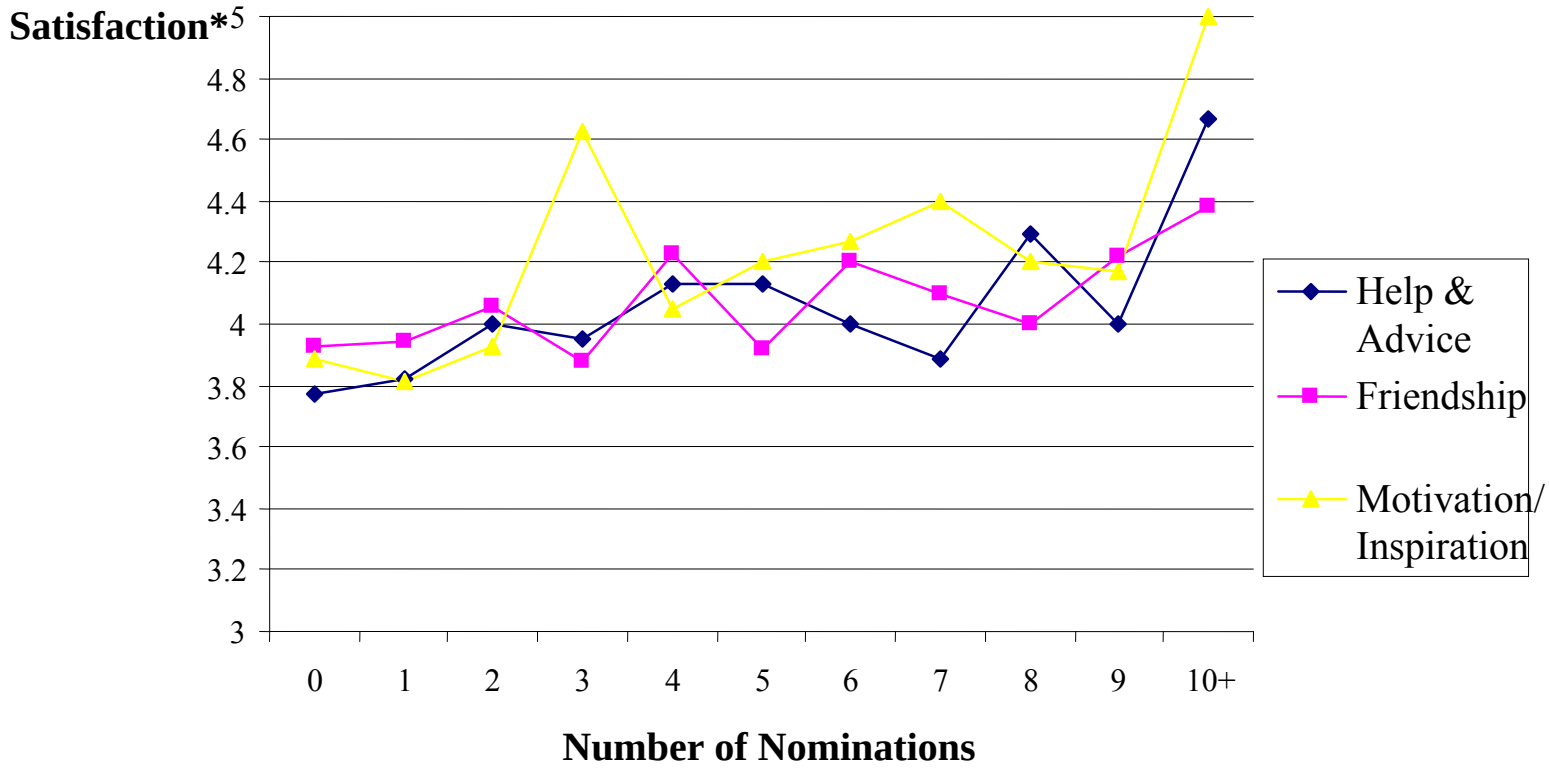


Figure 3
Level of Satisfaction by Number of Nominations Made, 2002 (N=148)



* Based on 5-point Likert scale of agreement with statement: "I am satisfied with my membership in BN."

Figure 4
Proportion Exited in Next Year by Number of Nominations Made, 2002
(N=148)