Identity and Power Use in Exchange Networks

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Abstract
We introduce a theoretical argument about how the fairness identity influences exchange behaviors in negotiated exchange networks. To test this argument, we use data from a laboratory experiment. Results demonstrate that by providing manipulated feedback that is inconsistent with the fairness identity standard (actual appraisals), inequality changes in the direction that counteracts the feedback. In addition, when high power actors think their high power exchange partners view them as either more or less fair than how they see themselves (reflected appraisals), inequality again changes in the direction that counteracts the nonverifying feedback. We discuss how considering both identity and exchange processes yields new insights into exploitative behavior in exchange.

Keywords
exchange, identity, fairness, power, social inequality

A recurring issue for social exchange theorists is how variations in the structure of exchange networks affect power use and inequality in those networks (e.g., Cook et al. 1983; Emerson 1972; Fiske and Molm 2010; Willer 1999). Exchange theorists have shown that the connections among a set of actors, as well as the value of those connections, affect how people negotiate the division of resources (e.g., Cook et al. 1983; Friedkin 1993; Markovsky, Willer, and Patton 1988). They emphasize how one’s position in the network structure results in resources being disproportionately channeled to some actors and not to others. Consequently, modern day exchange theorists have often adopted a minimalist conception of the actor (Lawler, Ridgeway, and Markovsky 1993), have assumed actors are self-interested, and have explained power use as a by-product of the exchange structure (Emerson 1972). A number of theories in the exchange tradition make these assumptions (Burke 1997).

Rather than viewing actors as simply motivated by the accrual of benefits and the avoidance of costs, identity theorists conceptualize actors as motivated to verify how they see themselves given their identity standard (Burke and Stets 2009). Peter J. Burke (1997) provided an identity-based explanation for exchange behavior by simulating how people make exchange agreements to verify

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their identities. He showed how power comes not just from the network structure and one’s ability to seek material benefits at the expense of others in exchanges, but it also comes from the identity verification process in which people try to confirm their identities by participating in exchanges.

In the present study, we build on Burke’s earlier research by considering how participant’s fairness identities might affect power processes in exchange networks when some have structural advantage over others. Specifically, we examine the degree to which individuals’ negotiation strategies in a bargaining situation are guided both by their position of power and their desire to accrue more material benefits, as well as the level of their fairness identity. We also examine whether the verification of the fairness identity influences the outcomes of subsequent negotiating behaviors. We test these ideas with data from a laboratory experiment. Our findings show the interdependence of power position, identity, and verification in explaining the development of inequality.

Social Exchange and Identity

Social Exchange and Structural Power

Exchange theorists view interaction as an exchange of valued resources (Homans 1974). While classical exchange theories focused on actors in dyadic exchange relations and the psychological processes underlying the exchange behaviors of those actors (Homans 1974; Thibaut and Kelley 1959), contemporary social exchange theories focus more on the structure or form of relations among sets of actors, such as the networks that connect individuals in exchanges (Molm 2006). Shifting the emphasis from actors to structures established relative power as an important focus (Emerson 1976).

In social exchange, power is an attribute of the relations between people, with those less dependent on a given relation for resources having a power-advantage (Emerson 1972). Network exchange structures, or the varied connections among a set of actors, dictate who can exchange with whom and for how much. Power imbalances arise when network alternatives make one actor (A) less dependent on another actor (B) for resources than B is on A (Emerson 1972).

This conception of power allows social exchange theorists to distinguish between potential and actual power. While potential power refers to the amount of dependence of each person on the other, actual power refers to the imbalances of resource distributions that actually occur given these dependencies (Emerson 1972). Research shows that structural conditions encourage interaction that benefits persons in power-advantaged positions in exchange networks (Cook and Emerson 1978; Markovsky et al. 1988). This is particularly true in negatively connected exchange networks where an exchange in one relation precludes an exchange in all other relations. In these networks, a disadvantaged actor may be excluded (and earn nothing), and thus may give up more when trying to make an exchange to avoid exclusion. The result is that the power-advantaged person may obtain more from the disadvantaged actor.

Not all negatively connected network structures exert the same amount of pressure on actors to use their power. Power-imbalanced exchange networks are of two types: strong or weak power depending upon the degree of power imbalance that exists (Markovsky et al. 1993). In strong power networks, actors in advantaged network positions can exclude others from exchanging without costs to themselves. This has the effect of motivating disadvantaged actors to engage in bidding wars that result in maximizing inequality between advantaged and disadvantaged actors. An example would be the three-person, line network (A1—B—A2) where the powerful B can exchange either with A1 or A2 and so is never excluded, whereas the two As must exchange with B, and one or the other will be excluded in each exchange opportunity. They begin to offer B more and more points to be included and gain at least a minimal amount.

In weak power networks, the advantaged persons lack the structural circumstances that allow them to exclude others free of cost to themselves. An example would be the four-person, line
network \((A_1—B_1—B_2—A_2)\). While the Bs can never be excluded, unlike the As, they have little incentive to exchange with each other because they are structurally equal, whereas they have some advantage over the As. The As do not have to offer much more than an equal split to entice the Bs to exchange with them, and the As do not bid against each other to be included.

Unlike outcomes in strong power networks, outcomes in weak power networks are sensitive to the characteristics of individual actors and the strategies they employ (Markovsky et al. 1993). More generally, the outcomes in strong power networks have a tendency to be guided more by the structure of the network compared with weak power networks, although this tendency begins to weaken, as the structure becomes larger (Lucas et al. 2001). Characteristics of the individual, thus, become more relevant in weak power networks, suggesting such networks are more appropriate settings for initially investigating how individual features affect exchange behaviors.

One’s perception of oneself as fair is one characteristic that may affect exchange behaviors in weak power, negotiated exchange networks. Negotiated exchanges involve the direct bargaining of actors in an effort to make an agreement. For example, when shopping for a new car, it is common for buyers to offer less than the sticker price, and for sellers to respond with a counteroffer more than the buyer’s offer, but less than the initial price. If a buyer and a seller are able to come to a mutually acceptable price, an exchange transaction will occur. If not, the buyer may go to another dealer. This example underscores the underlying conflict associated with a negotiated exchange, as well as the self-serving nature of the exchange.

Consistent with the idea that self-views of fairness may alter the exchange process, research has found that people curb their use of power. In other words, they are less likely to seek benefits at the expense of others when their fairness concerns increase by having information about what each actor in a network is receiving in the exchange (Cook and Emerson 1978). Other research reveals that one’s power position in a network affects preferences for the distribution of outcomes, with those in low power positions expressing a greater preference for equal distributions (Cook and Hegtvedt 1983). Preferences, in turn, shape how actors perceive exchange outcomes, with actors in power-advantaged positions viewing outcomes as more fair compared with actors in power-disadvantaged positions (Cook, Hegtvedt, and Yamagishi 1988; Stolte 1983). Thus, fairness concerns can temper power use, and power positions can modify fairness perceptions. This underscores the importance of fairness in exchange behaviors.

**Identity and the Fairness Identity**

Like social exchange theorists, identity theorists have examined the different types of social networks within which identities are embedded to understand the influence of networks on such processes as identity salience and commitment (Merolla et al. 2012; Walker and Lynn 2013). The assumption is that networks exist within the larger social structure, which, in turn, is differentiated into large, intermediate, and proximate social structures; large and intermediate structures impact proximate structures where interpersonal interactions, including exchanges, take place (Stryker, Serpe, and Hunt 2005).

Large social structures reflect those social relationships that are forged based on the stratification system of age, gender, race/ethnicity, and socioeconomic status lines. Intermediate social structures are more localized networks. They are closer to actual arenas of interaction and relationships than more generic stratification features, and they would include neighborhoods, schools, associations, and other organized social units in which a sizable group is together in one setting. Proximate social structures are the closest social networks to individuals, such as one’s family, social clubs within one’s school, or department within one’s university. Of importance is how participation in these social structures encourages specific identities, and how the enactment of these identities supports participation in these social structures.
While identities influence behavior in networks, identity theorists tend not to examine how differences in power across positions within a network influence behavior as social exchange theorists do. The role of the individual also differs across identity and exchange theories. While social exchange theorists acknowledge that actors are self-interested agents who seek to obtain valued resources (Lawler et al. 1993; Molm 2006), identity theorists focus on individuals’ desires to achieve verification of their identities and the resources they use to accomplish this. For example, Burke (1997) accounted for exchange outcomes by conceptualizing actors as having the identity of participant who achieved verification by participating in exchange as often as possible (Burke 1997). Thus, the verification of the participator identity is what gave rise to exchanging, and the accrual of material benefits was simply a by-product of the verification process. Although the goal is slightly different in social exchange theory and identity theory, the process by which actors achieve their goals is the same; What guides behavior is what they value. What may differ between approaches is what is valued.

An identity is a set of meanings that are stored within the identity standard and that define how individuals see themselves as persons (such as being fair, gregarious, or controlling), in roles (such as being a student, worker, or spouse), or as group members (such as belonging to a club, church, or sports team; Burke and Stets 2009). An identity is activated in a situation when the situation is perceived to carry meanings that align with how individuals see themselves in particular identities (Stets and Carter 2012). For example, if a CEO is talking to his fair-minded friend about how he plans to distribute bonuses to employees, and he sees himself as a relatively fair person, the fairness person identity is likely to get activated in the situation. This will motivate him to act in ways that are consistent with meanings of fairness within his fairness person identity and perhaps within his CEO role identity.

When an identity is activated and individuals perceive self-relevant meanings in the situation as matching the meanings in their identity standard, identity verification has occurred. Identity nonverification arises when people’s perceptions of self-relevant meanings in the situation do not match the meanings in their identity standard. Interestingly, nonverification can occur even when individuals think others perceive them more positively than they see themselves. For instance, Jan E. Stets and Michael J. Carter (2011) show that people have negative emotions whether others feel they are more moral than their moral identity indicates or when people feel they are less moral than their identity. Similarly, Peter J. Burke and Michael M. Harrod (2005) reveal that when others see individuals as more intelligent, attractive, or friendly than their identity standard indicates, they feel negative emotions as strongly as when others see individuals as having less of these characteristics. While identity verification increases positive feelings, and people continue to behave as they ordinarily do (their goal of verification has been met), identity nonverification increases negative emotions, and individuals will attempt to change their behavior to counteract the perceived discrepant meanings in the situation (Burke and Stets 2009).

In this research, we study the fairness identity, which is one aspect of one’s moral identity (Aquino and Reed 2002; Blasi 1984; Stets and Carter 2011, 2012). Like the moral identity, the fairness identity is a person identity. Person identity standards include the meanings that set a person apart from others as a unique individual (Burke and Stets 2009). These meanings are not attached to roles or groups, but are part of how individuals define themselves as individuals. They are always with the person and are relevant in most situations across groups and roles.

The fairness identity standard contains such meanings as being just and equitable. It recently has been acknowledged that issues of justice/fairness are so widespread that they may be part of a universal foundation of morality (Graham et al. 2011) and thus invoked across a great many social encounters including exchanges. The fairness identity ranges from low/moderate to high, with each person’s identity set at a particular level. On the low end of the continuum, individuals see themselves as not very or only moderately fair. On the high end of the continuum, they see themselves as being very fair.
Wherever individuals place themselves on the continuum, when the identity is activated, they will act in accordance with the meanings in their identity and seek to have it verified. Thus, it is not only those with a high fairness identity who will seek verification of their identity, as those with a lower fairness identity also will want others to see them as they see themselves. This leads to a somewhat counterintuitive process whereby people with low fair identities should resist claims of fairness, despite larger social norms concerning the social value of being fair. Low fair individuals should have trouble accepting claims that they are fair, just as high fair persons would have trouble accepting claims that they are not being fair. In this research, we examine whether and how such identity processes shape power use in exchange networks.

The Fairness Identity and Power Use

Fairness is particularly important for negotiated exchanges. Negotiated transactions involve individuals in different positions with different interests that may collide as each strives to obtain a desired outcome. Research has shown that in negotiated exchanges, there is a stronger perception of conflict than in reciprocal or productive exchanges; actors are more likely to perceive their partner’s behavior as unfair, and they are less willing to engage in unequal exchanges with them (Molm, Collett, and Schaefer 2006; Molm, Takahashi, and Peterson 2003). Thus, the bargaining process in negotiated exchanges is more likely than in other forms of exchange to attune actors to issues of fairness, which power imbalances might exacerbate. This makes negotiated exchange an ideal setting for initially studying how the fairness identity might influence power use.

As indicated, a fundamental tenet of identity theory is that when an identity is activated, people strive to act in ways consistent with their identities, and whether a particular identity is activated in a situation depends on its salience and situational fit or the presence of fairness issues in the situation (Burke and Stets 2009). Whether an individual is able to verify the identity, or come to believe others think that his or her behavior is consonant with the identity, depends on the individual’s ability to shape the situation. Thus, the ability of any individual to act more or less fairly in a negotiation depends not just on his or her fairness identity standard meanings but also on the identities of those with whom an individual interacts and the network conditions governing those interactions.

Negotiated exchanges occur between actors located in different, but connected, positions within a network of exchange relations. These actors each have their own fairness identity standards, which will motivate how they will behave. Thus, the fairness identity is a characteristic of the individual, but the distribution of fairness identities in a network is a characteristic of the network. Because actors enact behaviors consistent with their fairness identities as they seek identity verification, we expect that the distribution of earned resources in a power-imbalanced exchange network will vary depending both on the fairness identities of the actors in the network and the specific power positional location of the individuals in that network. For this research, we restrict our study to networks consisting of either all high or all low fairness identity individuals and consider how the verification process modifies power use across these networks.

When identity nonverification occurs because perceptions of self-relevant meanings in the situation become disturbed and no longer match the meanings in the identity standard, people have a negative emotional reaction (Burke and Harrod 2005; Burke and Stets 1999). In response, they act to change the meanings in the situation to counteract the disturbances and bring the meanings into alignment with the meanings in their identity standard (Burke and Stets 2009). Perceptions of self-relevant meanings in the situation may come from two sources: actual appraisals, reflected appraisals, or both (Kinch 1963). In this research, we study how both sources affect identity verification/nonverification and the subsequent effects of this on power use.

Actual appraisals are the direct feedback that persons receive regarding how others see them in the situation. Individuals experience others’ feedback often and in many situations such as at
work, at home, and with friends. We get feedback from our employer in the form of performance reviews as to how we are doing at our job, our spouse and children let us know whether we are being a good wife/husband and supportive parent, and our friends inform us when we live up to or fail in being a good friend.

For the actual appraisals in this study, we manipulate the direct feedback that actors receive regarding how others see them in the exchange. This manipulation involves providing actors information that their other exchange partners see them in a way that is either consistent with the actor’s fairness identity (actual appraisal verification) or inconsistent with the actor’s fairness identity (actual appraisal nonverification). Receiving nonverifying feedback should induce actors to change their behaviors to counteract the discrepant, nonverifying meanings and make those meanings more consistent with their identity. Indeed, research evidences this finding using actual appraisals (Burke and Stets 1999; Cast, Stets, and Burke 1999).

Thus, high fair people who are told they are not being fair should act in an even fairer manner than they had been, while low fair people who are told they are being very fair should respond by being even less fair. In each case, the response is to counteract the discrepant meanings. Because acting fairly in an exchange network reduces the level of emergent inequality in the distribution of earned resources, we hypothesize:

Hypothesis 1a (H1a): Power-imbalanced exchange networks of high fairness identity actors who are told that they are not being fair (actual appraisal nonverification) will produce less inequality in outcomes than similar networks of actors who are told they are being fair (actual appraisal verification).

Alternatively, low fair persons who receive feedback that they are being very fair should decrease the level of fairness of their behavior to counteract the assertion of fairness, thus resulting in more inequality. Therefore, we predict:

Hypothesis 1b (H1b): Power-imbalanced exchange networks of low fairness identity actors who are told that they are being fair (actual appraisal nonverification) will produce more inequality in outcomes than similar networks of actors who are told they are being unfair (actual appraisal verification).

Reflected appraisals are individuals’ perceptions of how they think others see them in the situation. They are individuals’ interpretations and understandings of others’ views of them. To the extent that others communicate or display their assessments overtly, and individuals clearly understand these assessments, actual appraisals and reflected appraisals will be highly correlated (Burke and Harrod 2005). Absent actual appraisals, the reflected appraisal process involves individuals interpreting the cues that others “give off” in the situation and the meanings implied by those cues. It also encourages them to call up their identity standard so they can compare how the meanings implied by others’ responses compare with the meanings in their identity standard. Essentially, the meanings in people’s identity standards come to consciousness so that they can evaluate whether their identity is verified in the situation.

In identity theory, researchers have examined how reflected appraisals influence the verification process. Like the evidence on actual appraisals, the evidence reveals that when there is a discrepancy between a person’s reflected appraisals and their identity standard, people change their behavior to counteract the discrepancy (Stets 2011; Stets and Carter 2011, 2012; Stets and Harrod 2004). However, whose reflected appraisals matter?

In identity theory, Alicia D. Cast and her colleagues (1999) found that among newly married couples, the higher status partner, that is, the partner with more education or occupational prestige, had greater influence on the self-views of the lower status partner than the reverse.
Specifically, the higher status partner’s reflected appraisals were more important for verification of the spousal identity than the reflected appraisals from the lower status partner. This is consistent with the prediction in expectations status theory that those with higher status relative to others in the social structure will have greater influence in interaction because they are seen as more competent (Berger, Wagner, and Webster 2014). Interestingly, when people in a social system lack information about the relative rank of individuals in that system, they turn to the distribution of rewards or outcomes to form expectations about the abilities of self and others (Cook 1975). People use differences in the distribution of rewards as the basis for making subjective assessments about relative ability; those who receive more rewards are perceived as having higher ability than those who receive less (Harrod 1980; Stewart and Moore 1992). Because higher ability is associated with higher status (Berger et al. 2014) and people tend to internalize the opinions of higher rather than lower status others (Webster and Sobieszek 1974), actors in our study should care about their reflected appraisals from their power-advantaged partners and discount their reflected appraisals from their power-disadvantaged partners. This is compatible with the idea that people are more likely to question and dismiss the evaluations of less powerful others and accept the evaluations of equal or more powerful others (Blau 1964). Consequently, in a power-imbalanced network such as the one we study, actors should be more responsive to how they think the advantaged actors view them. At issue is what effect responses to identity nonverification has on the exchange process?

Because power-imbalanced networks make power-advantaged actors less dependent on their power-disadvantaged exchange partners for resources, they tend to control the negotiation and the terms of agreement (Emerson 1972). In weak power networks where issues of exclusion are of little concern, the power-disadvantaged are motivated to reach agreements with their advantaged partners insofar as the advantaged offer more than their other, disadvantaged exchange partners. Similarly, the power-advantaged are motivated to make agreements with their disadvantaged partners so long as the disadvantaged provide more resources than agreements with their alternative exchange partners. When a range exists between what is acceptable for the power-disadvantaged partner and what is acceptable for the power-advantaged partner, inequality depends in large part on whether power-advantaged actors can maximize their benefits by forcing their power-disadvantaged partners to come to a minimally acceptable agreement.

Because the high power actors generally control negotiations with low power partners, we anticipate the effects of the reflected appraisal process on inequality will be driven by the high power actors. As high power actors are likely to discount the views of low power others while attending to those of the other high power actor, only the reflected appraisals of the other power-advantaged actors should matter. Consequently, high power actors who think that high-powered others see them as less fair than how they see themselves should increase their fairness behaviors to counteract the discrepant reflected appraisals. Similarly, high power actors who think that high-powered others see them as more fair than they see themselves should decrease their fairness behaviors for the same reason. Thus, we anticipate:

**Hypothesis 2 (H2):** The greater the nonverification (via the reflected appraisal process) of high power actors’ fairness identity by their high power exchange partner, the greater will be the amount of network inequality.

These hypotheses imply that actors in exchange relations do not doggedly pursue the accrual of material benefits/rewards at the expense of other aspects of the self. Fairness concerns motivated by a failure to have one’s identity verified may also influence the exchange processes and the degree of inequality that develops over time in the distribution of outcome resources.
Method

We test these hypotheses with a two-part study. First, a web-based survey gathered demographic information and measured each participant’s fairness identity. Second, a laboratory experiment combined procedures frequently used by social exchange researchers (Molm, Whitham, and Melamed 2012) with procedures used by William B. Swann and Craig A. Hill (1982) to examine reactions of individuals to identity verifying and nonverifying feedback.

Design and Participants

We recruited undergraduates from a large public university based on their desire to earn extra credit. The resource of exchange (here, extra credit points) ensured that the students met the primary scope condition of social exchange theory: They valued the resource that they were exchanging. Because we are concerned with differences in power use across networks of people with either high or low fairness identities, we set the fairness identity as a blocking factor (high or low fairness). In addition, we randomly assign participants into (1) a high or low power position within each exchange network, and (2) an identity verifying or nonverifying feedback condition (manipulated feedback). Thus, we have a 2 (High and Low Fairness Identity) × 2 (High and Low Power Position) × 2 (Verifying or Nonverifying Identity Feedback) design. There are 144 individuals for our results or 36 exchange networks.

Procedures

First, students filled out a web-based survey that asked them to rate themselves along a variety of dimensions including the fairness identity. Given their responses to the fairness identity items, we place them in one of three categories: the top, middle, or lower third of the overall fairness identity distribution. We use the top (most fair) and bottom (least fair) thirds to provide a strong contrast between people with different levels of the fairness identity. This follows the procedures of Swann and Hill (1982) who examined the impact of verifying or nonverifying feedback when individuals had a dominant or submissive identity. They divided their sample into thirds given the values on their dominance identity measure, and then they compared the top and bottom thirds to provide a strong contrast of the effects of verification and nonverification. Thus, half of our exchange networks were actors in the bottom third of the distribution for the fairness identity, and the other half of our exchange networks were actors who were in the top third of the distribution for the fairness identity. We label these low and high fairness identities, respectively.

Three weeks after filling out the survey, the students participated in the laboratory experiment. The delay between the survey and experiment reduced the likelihood that participants might make a direct connection between the two. After arriving at the lab, they were ushered into isolated rooms with a desk and computer. Instructions appeared on the computer screen informing them that they would be interacting with other students, and that the amount of extra credit they earned would depend on their interactions with these other students. The interactions were a series of exchange opportunities involving participants bargaining to receive points that would be converted into classroom extra credit points with the opportunity to earn up to three extra credit points. Participants had two exchange partners who each had a common alternative partner. A diagram of the four-person network (see Figure 1) hung on the wall for participants to see.

On any given exchange opportunity, participants had four rounds to negotiate a “deal” with either one of their two partners. They could make offers, counteroffers, or accept offers. Failing to reach an agreement with either exchange partner during the four rounds of negotiation resulted in the person not receiving points on that exchange opportunity. Although participants knew the range of points they could request from each of their partners, and they learned what the other
offered if there was no agreement, they did not know how much their partners earned once they reached an agreement. All they knew was what they requested, whether there were any counteroffers, and what they earned from an agreement. Keeping the earnings of the partner hidden helped to circumvent equity effects (Cook and Emerson 1978). In general, the procedures used are common for experiments in the power-dependence tradition (e.g., Cook and Emerson 1978; Lawler and Yoon 1996; Molm et al. 2012).

After completing the instructions that included two practice exchange opportunities, each network of four participants engaged in 30 exchange opportunities. To prevent end of bargaining strategies, participants did not know the total number of exchange opportunities. They also did not know that after exchange opportunities 8, 15, and 22, we would interrupt their negotiations with a brief survey. Each survey began with a short note saying negotiation would begin again in a few moments, but that we first wanted the participants to think about how fair each of the two people they had been interacting with had been, as well as how fair they had been.

Participants first were asked to think about how fair they had been to each partner, with scores ranging in value from 1 to 100, and high scores indicating greater fairness. Then they rated how fair they thought each of the two partners they interacted with thought they had been. Again, scores ranged from 1 to 100, and higher values represented greater fairness. We use these values to assess the degree of nonverification from reflected appraisals that we discuss later. Following participants’ evaluations of how fair they had been to each partner as well as how fair they thought each of the two partners thought they had been, and before resuming the exchanges, we administered the actual appraisals about how fair others in the exchange saw them, on average. These actual appraisals either verified or failed to verify the participant’s fairness identity.

**Manipulations**

**Power.** We randomly placed participants into a high or low power position within the four-person network. Those in the two high power positions negotiated with each of their two exchange partners and could request up to 24 points from each. Those in low power positions negotiated with one exchange partner from whom they could request up to 24 points and the other exchange partner from whom they could request up to eight points (see Figure 2). Having one exchange relationship with less than 24 points available structurally disadvantaged actors in the low power position insofar as it made them more dependent on their high power exchange partner for resources.

**Fairness identity.** The web-based survey measured the fairness identity using a 10-item, bipolar set of characteristics (Stets and Carter 2011, 2012). The items were very biased/very unbiased, very unfair/very fair, very just/very unjust, very irrational/very rational, very unreasonable/not at all reasonable, very unequal/very equal, very inequitable/very equitable, very principled/not at all principled, very evenhanded/not at all evenhanded, and very discriminatory/not at all discriminatory.
We asked participants to think about how they saw themselves on each characteristic and indicate where they would place themselves on the scale. Responses ranged from 1 to 7, where 1 reflected agreeing with one bipolar characteristic and 7 reflected agreeing with the other bipolar characteristic, and 4 placed the person in between the two bipolar characteristics.

The 10 items formed a single factor with an omega reliability of .94. Negatively worded characteristics were reverse coded, and we sum the items with a high score representing a more fair identity. Again, the top and lower third responses in the overall fairness identity distribution constituted the blocking factor of the high and low fairness identity. The mean score for the low fair participants on the 7-point scale was 4.65 (equivalent to 55.7 on a 100-point scale), while the mean score for the highest third of the participants was 6.01 (85.8 on a 100-point scale). The overall range of fairness identity scores was from 1.85 to 7.00 on the 7-point scale.

**Actual appraisals.** We also randomly assigned participants to one of two feedback conditions designed to convince them that their exchange partners were either verifying or not verifying their fairness identities, thus influencing the actual appraisals of participant’s self-relevant meanings in the situation. As mentioned, feedback occurred at three points during the exchange process: after exchange opportunities 8, 15, and 22 (of 30). At these three points, participants first indicated how fair they thought they had been to each of their partners as well as how fair they thought each of their partners was toward them.

We then informed participants as to how fair their exchange partners, on average, thought they had been (without identifying particular sources). In reality, this feedback was predetermined based on participants’ random assignment into a condition. Feedback fairness ratings ranged from 0 to 100 where lower values represented a low fairness rating and higher values represented a high fairness rating. Participants initially received (after exchange opportunity 8) either a rating of 55 (the average self-rating from the survey of the low fairness identity participants) or 85 (the average self-rating from the survey of high fairness participants). To prevent participants from becoming suspicious of the information across the four exchange phases, we randomly adjusted the second and third feedback ratings (after exchange opportunities 15 and 22, respectively) up to ±3 points.

Whether the feedback verified the fairness identity of individuals depended on the fairness identities of the actors in the network. If the feedback was a high fairness rating and the actors in the network had a high fairness identity, then the feedback verified their fairness identity. If the actors in the network had a low fairness identity, then the high fairness identity feedback did not verify their identity. Similarly, if the feedback was a low fairness rating, this verified the identity of actors in networks comprised of a low fairness identity, but it did not verify the identity of actors in networks made up of a high fairness identity. Overall, the design of the study was such that when the feedback was not verifying, those with a high fairness identity always were underverified, and those with a low fairness identity always were oververified.
Measures

Inequality. We measure inequality by calculating the points earned by those in high and low power positions given the total points that they could earn. We use an inequality measure that others have used (Molm, Takahashi, and Peterson 2000). It is:

\[ I_{AB} = \frac{(V_{AB} - V_{BA})}{(V_{AB} + V_{BA})}, \]

where \( I \) equals inequality, \( V_{AB} \) equals the total points A (the high power actor) received from B (the low power actor), and \( V_{BA} \) equals the total points B received from A. This measure ranges in value from \(-1\) to \(1\), with values closer to \(1\) indicating that the high power actor has secured more benefits and values closer to \(-1\), indicating that the low power actor has secured more benefits.

Because the experiment divided the 30 exchange opportunities into four phases, separated by the feedback occurrences after exchanges 8, 15, and 22, we calculated inequality for each negotiation phase. We calculated the phase 1 measure before the phase 1 feedback occurred.

Reflected appraisals. As mentioned above, after exchange opportunities 8, 15, and 22 and before participants received the manipulated feedback, participants were asked: (1) how fair they thought they had been toward each of their exchange partners and (2) how fair they thought each of their exchange partners thought they had been (reflected appraisals). Values ranged from 0 to 100 with higher values representing greater fairness. For each exchange partner at each of the three time points, we then subtracted how fair they had thought they had been toward the partner from the reflected appraisals to ascertain the degree of nonverification of the fairness identity. Positive values indicated that participants thought exchange partners viewed them (the participants) more fairly than they (the participants) viewed themselves, and negative values indicated that participants thought exchange partners viewed them as less fair than they viewed themselves.

We then created average measures of identity nonverification from these reflected appraisals. These measures were the average discrepancy (reflected appraisals minus own view) across the first three phases (there was no feedback after the fourth phase) for each partner. This created for each participant two identity discrepancy or nonverification scores, one for the high power partner and one for the low power partner. Because the network is the unit of analysis, and the two high power positions are equivalent, we analyze the mean nonverification score of the two high power actors. Table 1 presents the descriptive statistics for our measures.5

Analysis

Using the above measures as well as the manipulated variables, we examine whether the fairness identity affects inequality in the distribution of resources in exchange networks. We account for dependencies in our data in multiple ways. First, as is common in exchange research (Molm et al. 2000), some of our analyses use the network as the unit of analysis, with 36 different networks spread across four conditions. Second, because our analyses evaluate change in inequality over time, we control for earlier levels of inequality when evaluating the final inequality level. Finally, when examining how inequality within a network changes across time, our estimation procedures allowed for correlated errors due to the nonindependence of observations within a network. We accomplished this using Stata’s cluster option in the regressions.

Results

Before testing whether the verification process, as evaluated by both actual appraisals and reflected appraisals, influences inequality, it first is necessary to establish that resources initially
flow to those in powerful positions, as social exchange theory predicts. We do this by evaluating the measure of inequality for the first eight exchange opportunities, prior to the receipt of the first actual appraisal of identity verifying or nonverifying feedback. The results in Table 1 show that in the first eight exchanges, high power actors are somewhat more likely to accrue a greater proportion of the resources than low power actors ($t_{35} = 2.71, p \leq .01$). Because it is possible that the different identity compositions of the networks might also affect how resources are distributed, we next consider whether inequality in the first eight exchanges varied across networks consisting of people with different fairness identities. Comparing high fairness networks with low fairness networks shows no significant differences in inequality in the first eight exchanges ($F = 2.17, df = 3, p = .12$). Thus, prior to any verification occurrences, there are no differences in inequality between high and low fairness networks.

Once actors became aware of fairness concerns by receiving actual appraisals that are either verifying or nonverifying for their fairness identities, the differences in inequality began to emerge. To illustrate these cumulative effects of verifying and nonverifying feedback over time, we regressed the inequality measure on phase number (1, 2, 3, and 4), the fairness identity, and the interaction of phase and fairness identity allowing correlated errors within groups over time (clustering). We did this separately for verifying and nonverifying feedback over time. The results are shown in Table 2, which reports the standardized coefficients from the regression analyses.

The first column shows the effects for the verified conditions, indicating that inequality increases by a small (but significant) amount from one phase to the next as bargaining progresses, and that this relationship is not affected by the fairness identity (that is, there is no significant interaction between phase and identity). As participants receive identity confirming feedback, they are inclined to continue to do what they have been doing (Burke and Stets 2009), and perhaps show somewhat stronger power differences over time as they become accustomed to the bargaining situation. The second column shows the effects for those receiving nonverifying feedback. Nonverifying feedback has quite different effects for high and low fair participants as shown by the significant interaction effect of phase by fairness identity.

For the high fair participants who were not verified (the zero category), there is a strong decrease in inequality ($\beta = -.32, p \leq .05$) from one phase to the next. The effects for the low fair participants who were not verified is significantly different ($\beta = .56, p < .05$) from the effects for the high fair participants. Their slope shows an increasing amount of inequality of .24 ($\beta = -.32 + .56$) from one phase to the next. Thus, as hypothesized, high fair persons who receive

Table 1. Means and Standard Deviations of Variables ($N = 36$ Networks).

<table>
<thead>
<tr>
<th>Variables</th>
<th>$\bar{x}$</th>
<th>$\sigma$</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inequality (Phase 1)$^a$</td>
<td>.09</td>
<td>.19</td>
<td>-.29</td>
<td>.42</td>
</tr>
<tr>
<td>Inequality (Avg. of Phases 1–3)</td>
<td>.09</td>
<td>.18</td>
<td>-.22</td>
<td>.43</td>
</tr>
<tr>
<td>Inequality (Phase 4)</td>
<td>.09</td>
<td>.20</td>
<td>-.49</td>
<td>.45</td>
</tr>
<tr>
<td>Avg. Identity Discrepancy of HP Actor by reflected appraisals of HP Partner</td>
<td>-6.05</td>
<td>9.96</td>
<td>-29.67</td>
<td>17.50</td>
</tr>
</tbody>
</table>

Note. HP = high power; LP = low power.

$^a$Inequality ranges from -1 to 1, with positive numbers indicating inequality in favor of the advantaged actor. Phase 1 = after eight exchange opportunities; Phase 2 = after 15 exchange opportunities; Phase 3 = after 22 exchange opportunities; Phase 4 = after 30 exchange opportunities.
nonverifying fairness feedback act to increase their perceived fairness by reducing the inequality over time. Low fair participants who are told they are very fair act to decrease their perceived fairness by increasing the level of inequality. These findings are consistent with H1a and H1b, and show the effects begin early and increase over time.

Another approach for testing the level of inequality is to regress inequality in phase 4 (the final result of all the bargaining and exchanges) on the fairness identity, identity verification from the actual appraisals (verifying vs. not verifying), and the interaction of the two, controlling for the amount of inequality across the three previous exchange phases. Table 3 presents the ordinary least squares (OLS) standardized estimates from this regression analysis.

The results again reveal an interaction effect between discrepant feedback and the low fairness identity (β = .38, p < .05). This interaction effect can be seen more clearly in Figure 3, which shows the predicted, standardized level of inequality in phase 4 by verification condition for each fairness identity level after controlling for the initial level of inequality. The figure shows that when verified, inequality is about the same for high fair people as it is for low fair people, but that the difference becomes quite large for the nonverification condition. When networks of low fairness actors are told they are being very fair, they respond with even less fairness and generate more inequality than when they are told they are being unfair, which simply verifies who they are. Similarly, when networks of high fairness actors are told they are not being fair, they respond with less inequality than when their fairness identity is confirmed. Again, the results confirm H1a and H1b.

Table 2. OLS Standardized Estimates of Inequality.

<table>
<thead>
<tr>
<th></th>
<th>Verification condition</th>
<th>Nonverification condition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phase</td>
<td>.15*</td>
<td>−.32*</td>
</tr>
<tr>
<td>Low Fairness Identity</td>
<td>.17</td>
<td>−.31</td>
</tr>
<tr>
<td>Phase × Low Fairness</td>
<td>−.14</td>
<td>.56*</td>
</tr>
<tr>
<td>Identity</td>
<td>.01</td>
<td>.08</td>
</tr>
<tr>
<td>N</td>
<td>72</td>
<td>72</td>
</tr>
</tbody>
</table>

Note. OLS = ordinary least squares.
*The difference in effects between verification conditions is significant (p ≤ .05).
High = 0, Low = 1. *p ≤ .05. (one-tailed test).

Table 3. OLS Standardized Estimates of Inequality in Phase 4 (N = 36 Networks).

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>β</td>
<td>β</td>
</tr>
<tr>
<td>Average Inequality, phases 1−3</td>
<td>.73*</td>
<td>.77*</td>
</tr>
<tr>
<td>Low fairness</td>
<td>−.10</td>
<td>−.16</td>
</tr>
<tr>
<td>Identity discrepant feedback (actual appraisals)</td>
<td>−.27*</td>
<td>−.30*</td>
</tr>
<tr>
<td>Low Fairness × discrepant feedback</td>
<td>.38*</td>
<td>.44*</td>
</tr>
<tr>
<td>Discrepancy of reflected appraisals from HP partner</td>
<td>.21*</td>
<td>.44*</td>
</tr>
<tr>
<td>Discrepancy of reflected appraisals from LP partner</td>
<td>−.10</td>
<td>.64*</td>
</tr>
<tr>
<td>R²</td>
<td>.60*</td>
<td>.64*</td>
</tr>
</tbody>
</table>

Note. OLS = ordinary least squares; HP = high power; LP = low power.
* p ≤ .05. (one-tailed test).
While the actual appraisals are one source for assessing self-meanings in the situation that can be compared with the identity standard in the verification process, reflected appraisals are another source of self-meanings. We expect that discrepancies between reflected appraisals from the power-advantaged partner and the identity standard of the high power actor will increase inequality (H2).

Model 2 in Table 3 tests this relationship by including a reflected appraisal verification measure for the high power partner. It also includes a similar measure for the low power partners. The first measure calculates the discrepancy between the fairness identity standard of a high power participant and their reflected appraisals from their high power exchange partner in terms of fairness, averaged across the three phases. The second measure considers the reflected appraisals of their low power exchange partner. While we do not expect the second measure to have a significant effect, we include it nonetheless as further evidence of the conditional nature of the reflected appraisal verification process.

Consistent with H2, the lack of verification of the high power actors’ fairness identity has a significant effect on inequality, but only with respect to the reflected appraisals of the high power exchange partner ($\beta = .21, p < .05$). The positive coefficient indicates that when these reflected appraisals are too high, that is, when individuals think other high power actors see them as fairer than they see themselves, they act to reduce their level of fairness in an attempt to change how they think the other sees them (which they feel is too fair). By acting less fair, they increase the level of inequality. Similarly, when the reflected appraisals are too low, that is, when individuals think other high power actors see them as less fair than they see themselves, they act to increase the level of fairness by reducing the level of inequality.

**Discussion**

People in positions of power can and do take advantage of others (Piff et al. 2012). Social exchange theorists explain this by focusing on the structural circumstances that motivate power use, generally concluding that to have power is to use it (Emerson 1972). Thus, they contend the
unequal distribution of resources is a by-product of self-interested actors taking advantage of their structural position (Emerson 1972; Willer 1999). While identity theorists acknowledge the role structure plays in the development of the self (Merolla et al. 2012; Stryker et al. 2005; Walker and Lynn 2013), they direct our attention to another source of motivation in exchanges other than structural power. Rather than focusing on motive of self-interest, they suggest a motive of identity verification. The present research examines both identity and exchange concerns by studying how the fairness identity can exaggerate or depress structural pressures toward inequality. In this way, it contributes to ongoing research about how aspects of the individual can inform exchange behaviors (Willer, Gladstone, and Berigan 2013).

In this paper, we examined how structurally induced power processes in exchange networks varied across two levels of the fairness identity. We found that initially, before the verification process set in, the fairness identity had little effect on the amount of inequality in these weak power exchange networks. Power-advantaged actors used their position to secure a disproportionate amount of the resources regardless of whether the network was composed of participants with high fair or low fair identities.

Consistent with past exchange research, we recruited participants based on their desire to earn extra credit and told them their objective in the experiment should be to try to earn as many points as possible to exchange for extra credit in classes. These initial conditions likely suppressed the activation of the fairness identity, or at least kept it from overcoming a self-interested exchange identity. After the first phase, when participants were asked to consider how fair they had been as well as how fair they thought others thought they had been, the situation forced individuals to reflect on the fairness of their own and other’s past behaviors, thereby activating the fairness identity. This, in turn, affected inequality across the two levels of the fairness identity that we studied. Our results showed that both the actual appraisal verification process and the reflected appraisal verification process are important in predicting inequality in the network.

Two of our results stood out. First, for the actual appraisals feedback, high fairness participants who were told they were being unfair (nonverifying identity feedback) acted to increase their perceived fairness by decreasing the level of inequality, while low fairness participants who were told they were being very fair (nonverifying feedback) compensated by increasing the level of inequality. Second, with respect to reflected appraisals, high power actors did not attend equally to the reflected appraisals from each of their two exchange partners. Consistent with prior research (Cast et al. 1999), the reflected appraisals of only the high power exchange partner mattered. Thus, the nonverifying reflected appraisals feedback from the high status partner had the same effect on inequality as the actual appraisals feedback. These findings extend our understanding about how power structures shape the identity process embedded within them, and they point to the need for further exploration of the limits and constraints that social structure places on these processes.

Despite the advances this research makes by taking into account identity verification when studying exchange processes, there are some limitations. In examining a four-person, weak power, negotiated exchange network, we were unable to address how these effects might differ in other network structures. A strong power network may diminish or eliminate the identity effects we found as suggested in the research of others (Lucas et al. 2001). Alternatively, because reciprocal exchange networks obfuscate fairness concerns (Molm et al. 2006), the fairness identity may be less effective in guiding behavior in such networks. Future research needs to investigate these issues.

In addition, in studying networks consisting of actors with either a high or a low fairness identity, we were unable to provide high fairness identity participants with actual appraisal feedback that told them they were too fair, or low fairness identity participants with feedback that they were too unfair. Thus, high fairness participants were either verified or underverified, while low fairness participants were either verified or oververified. We did not investigate the
full range of effects. However, when examining the effects of the reflected appraisal process, both high and low fairness identity participants received reflected appraisals that were sometimes too high and sometimes too low, and the discrepancies had the effects hypothesized by identity theory, and that have been found in earlier research (Burke and Harrod 2005; Stets and Carter 2012).

Furthermore, the present research did not examine networks with different mixtures of the fairness identity, for example, high fairness identity actors exchanging with low fairness identity actors. By restricting the present research to the simpler case of studying networks of actors all with the same fairness identity levels, we necessarily limited our insights into how power processes play out when individuals with different self-conceptions of fairness must negotiate for resources. Empirical work needs to investigate these more complex scenarios.

Future research also will want to examine identities other than the fairness identity. For example, previous research has studied the control identity, which includes self-meanings of being dominant and controlling of others (Stets and Burke 1996). An actor’s control identity is relevant to situations such as weak power social exchange networks in which actors are motivated to obtain valued resources at the expense of others. Those with a high control identity may be more inclined to force others to succumb to their demands than those with a low control identity.

Nevertheless, we think the current research importantly advances our understanding of how person identities can affect power processes in exchange networks. The work begins to show how individuals may have conflicting motives of self-interest and fairness when exchanging with others. When prompted to pursue self-interest, high power actors will exploit their situation to obtain a disproportionate portion of a pool of resource. Moreover, if they believe that this behavior is consistent with their fairness identities, they will continue to behave in this way. The underverification of high fair actors (that is, being told that they are not being very fair) can overcome this and produce more equal distributions of resources. Thus, this research points to one possible intervention for overcoming structural inequities. This involves not verifying the fairness identity of those in positions of power who think they are very fair.

This research also offers a new way of thinking about how social networks affect the identity process. By considering positions as locations in exchange networks, we move away from the traditional identity approach of thinking of network positions as culturally infused roles. This allowed us to consider how power can both enable and limit the ability of actors to behave in ways that are consistent with their identities.

In sum, our research advances both identity theory and social exchange theory while generating insights that speak directly to the issue of social inequality. Obtaining a better understanding of the interplay between structure (society) and agency (the individual) speaks to the issue of how social relations constrain individual strategies in bargaining, as well as how individual strategies can overcome the limitations of social structure.

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Notes
1. Reciprocal exchange, like gift giving, involves no negotiation. Similarly, productive exchange, like the cooperative creation of a product, also involves little negotiation.
2. In addition to tapping into the fairness identity, the survey asked respondents questions about socioeconomic background, self-esteem, authenticity, emotions, coping strategies, and religiosity. By embedding our fairness identity items in a larger survey on self-concept, we attempted to conceal the nature of the study.
3. In addition to the fairness items, the intermittent surveys had participants indicate what they were feeling at that moment as well as a number of self-efficacy and coping questions. We recognize the repeated questionnaire could have alerted participants to our interest in fairness for this study. To the extent that was true and that participants adjusted their behavior accordingly, we would expect given past research (e.g., Cook and Emerson 1978), actors to behave more fairly, and we would expect the same effects in all conditions. Our results, however, show otherwise. People with different levels of the fairness identity responded to the fairness manipulation differently, suggesting that the results are more consistent with an identity argument than with an equity argument. Moreover, the experimental design concealed actual earnings from the participants, making it impossible for them to know with certainty how they were doing relative to their partners. This, too, casts doubt on the plausibility of an equity-based argument.
4. The fairness identity values in the survey ranged from 10 to 70. We transformed these values to a 0 to 100 scale. Those with a low fairness identity had an average score of 55, and those with a high fairness identity had an average score of 85. An average score of 55 indicates that those respondents labeled as low fair are only low in relative terms.
5. In supplementary analyses (not shown, but available upon request), we also included exchange frequency as a measure to control for the possibility of inequality being a function of the frequency of exchange. Including a measure of exchange frequency in our models did nothing to change our results, but we elected not to report these findings because of the lack of variability in our measure of exchange frequency. At the network level, participants completed an average of 29 exchanges out of a possible 30.
6. We tested the difference in results between the verifying and nonverifying conditions, and it is significant ($p \leq .05$).
7. We obtained slightly stronger results when we control for phase 1 inequality rather than the average over the first three phases. In addition, we obtained substantively similar results after controlling for the average number of transactions between high power and low power actors. This suggests that the findings reported in this paper are not simply a by-product of differences in transaction frequency. These results are available upon request.
8. In a subsequent analysis (not shown), we considered whether the responses of low power actors to nonverification as a result of the reflected appraisal process affected inequality. This model included the two average reflected appraisal measures for the low power actors, which were created in the same way as the two average reflected appraisal measures for the high power actors. Unlike for the power-advantaged actors, these measures were relatively highly correlated ($r = .59$), and both were insignificant. Incorporating them in the model weakened the relationship between the high power actors’ average reflected appraisals for the equal power partner ($p \leq .10$). However, this analysis is suspect given our small sample size and the inclusion of two insignificant covariates.
9. An alternative explanation would be that the eight exchange opportunities (and the two practice trials) did not provide enough experience for participants to understand how their behaviors influence the outcome of others, preventing them from thinking about their behaviors in terms of fairness.

References


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