
CURRENT RESEARCH IN SOCIAL PSYCHOLOGY

<http://www.uiowa.edu/~grpproc/crisp/crisp.html>

Volume 14, No. 7

Submitted: October 9, 2008

First Revision: December 10, 2008

Accepted: December 30, 2008

Published: January 4, 2009

DOES MAJOR MATTER? CONSIDERING THE IMPLICATIONS OF COLLECTING VIGNETTE DATA FROM OUR STUDENTS

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ABSTRACT

Social psychologists in both sociology and psychology commonly use vignettes to gauge how people might respond in a given situation. Research subjects in such studies, like those in other experiments, are often undergraduates, surveyed or recruited in classes. While there has been significant attention to the generalizability of students' attitudes to other groups, here we turn our attention to differences within the student population and ask how reliable responses are from particular classes. With previous research suggesting that college coursework influences egalitarianism, defection rates in ultimatum games, and attribution of blame, researchers must consider that the differences in subject pools might affect other variables of interest. In this research we compare responses to vignettes about procedural, interactional, and distributive justice from students in popular sociology and business classes. The results indicate that there is no significant difference in the how these two groups conceptualize justice. We discuss the importance of this null-finding.

INTRODUCTION

Vignettes are a common research tool used by social psychologists to gauge respondents' presumed reactions to hypothetical situations (Alexander and Becker 1978). They are particularly popular because they are an inexpensive and relatively quick way to collect data. Often, these vignette surveys are distributed in university courses. Even when vignette surveys are completed in a laboratory setting, the subjects are often recruited in large courses (Willer and Walker 2007). Given researchers' desire to build and test theory with these experiments rather than to produce directly generalizable results, researchers often feel comfortable with these subject pools. However, with research suggesting that college coursework influences egalitarianism (Hastie 2007a, 2007b), corruption (Frank and Schulze 2000), free-riding (Marwell and Ames 1981), defection rates in ultimatum games (Frank, Gilovich, and Regan 1993; James, Soroka and Benjafield 2001), and attributions of blame for social problems (Guimond, Begin, and Palmer 1989, Guimond and Palmer 1990), it is important to ask whether the subject of the surveyed courses potentially affects the responses to the vignettes.

The following paper specifically explores these potential effects by comparing social science and business students' responses to a hypothetical situation designed to elicit justice judgments. To position this paper in previous research, we begin with a discussion of the connection between education and values and a survey of the subject pools used in recent vignette studies. We then briefly describe the types of justice perceptions we measure and present our results. We conclude with limitations of this particular study and vignette research in general, as well as potential future directions.

EDUCATION AND VALUES

It is well-documented that a college education affects individuals' values. Previous findings suggest that people who are college educated are less prejudiced and have more egalitarian views (e.g. tolerance for minorities and support of social welfare programs and left-wing economic programs [Hastie 2007a]) than the general population (Newcomb 1943/1957, Pascarella and Terenzini 1991). The two explanations typically given for this relationship are that people with less prejudiced attitudes self-select into college or students are socialized through the college experience or specific coursework into a more egalitarian attitude (Hastie, 2007b). However, there is little research looking at variation within college students rather than between those who are and are not enrolled in higher education.

We found no studies explicitly comparing student respondents for methodological reasons. However, there is research on the effect of academic training that suggests that students' courses influence their perceptions of the world around them. For instance, researchers have found that social science students differ from business and physical science students on their explanations for the cause of social problems. Furthermore, these differences begin early in one's academic career (Guimond, Begin, and Palmer 1989; Guimond and Palmer 1990). Social science students are more likely to blame structural forces for poverty, unemployment, and economic inferiority, attributing these issues to systemic problems like low-wages and government policies. Business and physical sciences students, on the other hand, are more likely to assume attributes of the individual (e.g. lack of effort, foolish spending, and bad morals) cause these outcomes. Results

suggest that these differences emerge as early as the first year of specialized coursework and are a product of both a selection-effect and of socialization in courses (Guimond and Palmer 1990).

A long-standing debate in economics on whether economists are different than other college students (Frank, Gilovich, and Regan 1996; Yezer, Goldfarb, Poppen 1996) cites research suggesting that similar effects of self-selection and socialization might lead those who study economics to be more corrupt (Frank and Schulze 2000) and self-interested (Frank et al. 1993; James et al. 2001; Marwell and Ames 1981). While we don't further engage this debate here, we do draw on this research to ask whether major matters in our survey samples.

THE USE OF VIGNETTES

Appendix A lists vignette studies appearing in the last two years of the two principal social psychology journals, *Journal of Personality and Social Psychology*, a primarily psychological publication, and *Social Psychology Quarterly*, which is largely sociological. This table is heavily dependent on the studies in *Journal of Personality and Social Psychology*. Only two of these studies were published in *Social Psychology Quarterly*. However, the tradition of using vignette in sociological social psychology, as well as in *Social Psychology Quarterly*, is strong (e.g. Hegtvedt, Thompson, and Cook 1993; Jasso and Webster 1997; Shelly 2001). As is clear from the table, there is quite a bit of research that employs vignettes, covering topics from attributions to social knowledge. There is also variation in the pools of respondents. While sixteen studies draw from psychology courses, two studies are drawn from business courses, one each from courses in nursing and sociology, and twenty-seven studies are unspecified. Are students in these courses similar in attitudes, values, and on other social psychological dimensions?

Of course we would not expect that all topics listed in Appendix A would differ across student majors. For instance, topics that are not particularly salient or that have not been discussed in coursework might elicit similar responses across students from different courses. On the other hand, things that are regularly covered would likely yield differences. For instance, some research suggesting that economics students are more likely to defect in ultimatum games attributes this behavior to having learned about such games in classes, rather than differences in ethics or values (James et al. 2001). Similarly, structural causes of social problems are likely to be addressed in social science courses, increasing the likelihood students would begin to perceive structure as important.

One area of social psychology that often uses vignettes is research on justice (e.g. Hegtvedt et al. 1993; Jasso and Webster 1997). With students in both social sciences and business likely to cover issues of justice, albeit differently, and with cross-cultural differences found in such perceptions (Gelfand et al. 2002), we might expect that perceptions of justice vary by student training. To test whether major matters in reactions to perceived injustice, we compare perceptions of three types of justice – distributive, procedural, and interactional – of students in two large, mid-level classes at a private university in the Midwest. One class is geared toward social science majors (primarily sociology, psychology, and anthropology), the other to undergraduate business students. Before we describe the results, it is important to clarify the dimensions of justice we focus on here.

TYPES OF JUSTICE

Distributive justice (Homans 1974, Adams 1965) is the perceived fairness of allocation of rewards or costs among individuals. Distributive justice can be understood in terms of equity, where the distribution is proportional; equality, where the distribution is equal; or need, where those with greater need receive greater rewards. Typically, when people in the United States think of justice, most consider equity above equality or need (Hegtvedt and Markovsky 1995). In general, evaluations of fairness are based on two things: (1) justice expectations, or the expectations individuals have from past experience or base on social norms, and (2) on social comparisons, or the ways by which individuals compare themselves to the others in the interaction.

Procedural justice (Folger 1977; Lind and Tyler 1988; Thibaut and Walker 1975), on the other hand, is the perceived fairness of the process by which such rewards or costs are distributed. Research in this area has focused on developing rules that constitute fair practices and procedures or outlining which characteristics of situations tend to result in people perceiving the procedure as fair. Recent research indicates that procedural fairness is important independent of the outcome. In other words, people may feel that the process is fair even if the outcome. In addition, perceptions of fairness of the process might enhance perceptions of fairness of the outcome (Lind and Tyler 1988).

While there are many components of procedural justice, the earliest conception of procedural justice focused on an actor's perception of his or her control over the fairness of the process (Thibaut and Walker 1975). This instrumental approach assumes that people are focused primarily on their outcomes and attempt to control the process as a way to shape these outcomes. This type of control is a zero-sum game and if a third party is needed to arbitrate or mediate the situation, the threat of losing control over the process can reduce perceptions of procedural fairness (Karambayya and Brett 1989). Later work focuses on other aspects of ostensibly fair processes, including the important of voice (Greenberg and Folger 1983). Situations in which individuals are able to offer their side, or give "voice," are perceived as fairer (Folger 1977).

Emerging from work on procedural justice is recent work drawing a distinction between the perceived fairness of the process and the fairness of those engaged in the process (Bies 2001). Such fairness of others is considered interactional justice. While early research in this area focused on perceptions of fairness of the supervisor (e.g. Organ and Moorman 1993; Skarlicki and Folger 1997), recent research has examined the fairness of the interaction between peers. Findings suggest that perceptions of interactional justice are higher when a causal explanation is given for unfair or unequal treatment (Bies and Shapiro 1987) and when interaction is seen as more cooperative than competitive (Molm, Collett and Schaefer 2007).

EXPERIMENTAL DESIGN AND PROCEDURES

To test whether one's academic training affects their perceptions of these types of justice, we administered vignettes and an attached questionnaire to students in two large courses – one business and the other sociology – in the spring semester of 2008. The vignettes introduced a scenario in which the respondent and a former business partner, Taylor, participate in a process

to liquidate the assets from a shared company. Regardless of the procedure used, the result is an arguably unfair outcome, with the respondent ending up with less than half the available profit (42%).

We chose this outcome because under-reward is more likely to motivate immediate justice considerations (Barrett-Howard and Tyler 1986; Jasso 1978). We chose to name the business partner as a way to add to the believability of the situation. After pre-testing three names (Chris, Morgan, and Taylor), Taylor elicited the most diverse assumptions about the gender of the business partner. Still, the majority of both men and women believed Taylor was a man, likely because of the business scenario. Also, the students in the business class were more likely to think that Taylor was a man than the students in the sociology class. These gender assumptions do not affect the results.

With the outcome the same across conditions, it is the liquidation process – negotiation, mediation, or arbitration – that is crossed with course as the second factor in the 2x3 factorial design. Table 2 shows the number of respondents in each group, separated by gender. While there are more women in the social science class, and more men in the business class, gender made no difference in the analyses presented here. Respondents are well distributed across the three levels of intervention.

Table 1: Breakdown of Respondents by Gender, Course, and Resolution Process

	Negotiation N=80		Mediation N=79		Arbitration N=80		Total
	<i>Social Sciences</i>	<i>Business</i>	<i>Social Sciences</i>	<i>Business</i>	<i>Social Sciences</i>	<i>Business</i>	
Men	9	23	11	24	19	23	109 (46%)
Women	30	18	28	16	17	21	130 (54%)
	34%*	33%**	34%*	32%**	32%*	35%**	149

Notes: Of 114 social sciences students, 34% were male. Of 125 business students, 56% were male. * = of social sciences students, ** = of business students

The vignettes (Appendix B) were randomly distributed among students. They described a conflict of interest, the process used to settle the conflict, and the unequal outcome. Other than the description of the processes – negotiation, mediation, and arbitration – the three vignettes were identical.

Measures

After reading the vignettes, respondents completed an attached questionnaire. The questionnaire included questions about the respondent's perceptions of fairness of the dispute resolution process (procedural justice), perceptions of fairness of the distribution of assets (distributive justice), and the perceptions of fairness of Taylor and the third party if one was present

(interactional justice). All items on used 7-point, bipolar, semantic differential scale. We recoded these so that higher values indicate more positive outcomes.

To assess respondents’ perceptions of procedural justice, we use a two-item scale, “How would you describe the [negotiation/mediation/arbitration] process?” (fair/unfair, just/unjust). The alpha reliability of this scale is .92.

We measure distributive justice with a similar two item scale a three-item scale asking about the outcome fairness and justness (fair/unfair, just/unjust), and whether the outcome was reasonable (reasonable/unreasonable). With these three items combined, the alpha reliability is .86.

We look at perceived fairness of interactions with both Taylor and the third party, if one was present. Interactional justice of Taylor was measured with a scale combining two questions, “How would you describe Taylor” (fair/unfair, reasonable/unreasonable). The alpha reliability of this scale is .84. The same two questions, although with the third party as the target, determined perceptions of interactional justice of the mediator or arbitrator. This second scale’s alpha is .86.

RESULTS

Table 2 shows the means and standard deviations of the four measures of justice by resolution process and course. Analyses of variance (not shown here) suggest that there are no statistically significant differences between the business classes and sociology classes on the perceptions of procedural, distributive or interactional justice. These results indicate that students in business and sociology classes *do not* significantly differ in evaluations of justice. In fact, the only significant difference between conditions is an effect of third party intervention in the resolution process on procedural fairness ($F = 14.11, p < .001$). Consistent with previous research, the more a third party exerts control over the process and the outcome, the lower ratings of procedural fairness (Karambayya and Brett 1989). A similar effect of intervention with regard to perceptions of distributive fairness was borderline significant ($F = 2.79, p = .06$). These results suggest that coursework does not affect perceptions of justice in any of the dispute resolution processes.

Table 2: Means and Standard Deviations of Measures of Perceptions of Justice by Course and Resolution Process

	Negotiation		Mediation		Arbitration	
	<i>Social Sciences</i>	<i>Business</i>	<i>Social Sciences</i>	<i>Business</i>	<i>Social Sciences</i>	<i>Business</i>
Procedural	4.72 (1.74)	4.72 (1.74)	4.53 (1.31)	4.12 (1.45)	3.56 (1.46)	3.68 (1.85)
Distributive	3.72 (1.39)	3.38 (1.50)	3.43 (1.32)	3.33 (1.07)	3.14 (1.32)	3.17 (1.31)
Interactional: Taylor	4.26 (1.52)	4.28 (1.36)	4.02 (1.27)	4.38 (1.39)	4.13 (1.22)	4.17 (1.53)
Interactional: Third Party	--	--	3.95 (0.41)	4.01 (0.65)	3.92 (0.79)	3.97 (0.40)

DISCUSSION

Our findings should be comforting for those who study justice, an area of social psychology that often uses vignettes (see Karen Hegtvedt's work for numerous examples). While researchers who study justice tend to work in psychology, sociology, and business departments, and draw convenience samples from students in their own or colleagues' classes, our research indicates that students in these departments do not differ significantly on evaluations of justice. In other words, the results of previous vignette research should apply to college educated individuals in general. These findings should alleviate some concern over the choice of vignette respondents in both previous and future research on justice. However, researchers must keep in mind that previous research has shown that college coursework matters for other social psychological processes (e.g. attributions of blame, defection, and egalitarianism) and these differences should be considered by future researchers in light of the topic being studied.

Another potential limitation of this research is that it solely used vignettes and associated questionnaires to gauge perceptions of justice. With recent research suggesting that vignettes are not as effective at evoking justice considerations as laboratory experiments (Collett 2008), where individuals actually engage in the processes and suffer monetarily as a result of the outcome, it should be considered that any differences between business and social science students were muted by the method's weakness in motivating justice considerations. Perhaps future research on justice, in both the laboratory and vignettes, should collect data on student coursework or majors.

A possible remedy to any concerns about generalizability (either due to differences within the student population, or between students and those who do not attend college or who are older) is the use of nationally representative samples. Programs like TESS (the National Science Foundation funded program Time-Sharing Experiments in the Social Sciences) allow researchers with an experimental design to collect nationally representative data. Researchers are just beginning to analyze the differences between such representative data and that collected from college students (e.g. Lovaglia et al. 2008). This type of comparison is valuable in general, but particularly to those who draw from the student population for research subjects.

In sum, we believe that the null-results presented here are important. In this case, lack of a significant difference is still quite significant. While previous research finds important differences in perceptions and values of business versus social science students, such differences are not apparent in perceptions of distributive, procedural, or interactional justice. This has implications for those with an interest in perceptions of justice or education's effects, specifically, but also for social psychologists more generally.

REFERENCES

- Adams, J. Stacy. 1965. "Inequity in Social Exchange." *Advances in Experimental Social Psychology* 2: 267-299.
- Alexander, Cheryl S. and Henry Jay Becker. 1978. "The Use of Vignettes in Survey Research." *Public Opinion Quarterly* 42: 93-104.
- Bain, Paul G., Yoshihisa Kashima, and Nick Haslam. 2006. "Conceptual Beliefs about Human Values and Their Implications: Human Nature Beliefs Predict Value Importance, Value Trade-Offs, and Responses to Value-Laden Rhetoric." *Journal of Personality and Social Psychology* 91: 351-367.
- Barrett-Howard, Edith and Tom R. Tyler. 1986. "Procedural Justice as a Criterion in Allocation Decisions." *Journal of Personality and Social Psychology* 50: 296-304.
- Bartz, Jennifer A. and John. E. Lydon. 2006. "Navigating the Interdependence Dilemma: Attachment Goals and the Use of Communal Arms with Potential Close Others." *Journal of Personality and Social Psychology* 91: 77-96.
- Bies, Robert and D. L. Shapiro. 1987. "Interactional Fairness Judgments: The Influence of Causal Accounts." *Social Justice Research* 1: 199-218.
- Bies, Robert 2001. "Interactional (In)Justice: The Sacred and the Profane." Pp 89-118 in *Advances in Organizational Justice*, edited by J. Greenberg and R. Cropanzano. Stanford, CA: Stanford University.
- Boyes, Alice D. and Garth J. O. Fletcher. 2007. "Metaperceptions of Bias in Intimate Relationships." *Journal of Personality and Social Psychology* 92: 286-306.
- Chun, Woo Young; and Arie W. Kruglanski. 2006. "The Role of Task Demands and Processing Resources in the Use of Base-Rate and Individuating Information." *Journal of Personality and Social Psychology* 91: 205-217.
- Cohen, Geoffrey L., David K. Sherman, Anthony Bastardi, Lillian Hsu, Michelle McGoey, and Lee Ross. 2007. "Bridging the Partisan Divide: Self-Affirmation Reduces Ideological Closed-Mindedness and Inflexibility in Negotiation." *Journal of Personality and Social Psychology* 93: 415-430.
- Collett, Jessica L. 2008. "Methodological Considerations for Research in Justice and Social Exchange." *American Sociological Society Annual Meeting*. Boston, MA.
- DeWall, C. Nathan and Roy F. Baumeister. 2006. "Alone but Feeling No Pain: Effects of Social Exclusion on Physical Pain Tolerance and Pain Threshold, Affective Forecasting, and Interpersonal Empathy." *Journal of Personality and Social Psychology* 91: 1-15.

Exline, Julie Juola, Roy F. Baumeister, Anne L. Zell, Amy J. Kraft, and Charlotte V. O. Witvliet. 2008. "Not So Innocent: Does Seeing One's Own Capability for Wrongdoing Predict Forgiveness?" *Journal of Personality and Social Psychology* 94: 495-515.

Fischer, Agneta and Ira J. Roseman. 2007. "Beat Them or Ban Them: The Characteristics and Social Functions of Anger and Contempt." *Journal of Personality and Social Psychology* 93: 103-115.

Fischer, Peter, Tobias Greitemeyer, and Dieter Frey. 2008. "Self-Regulation and Selective Exposure: The Impact of Depleting Self-Regulation Resources on Confirmatory Information Processing." *Journal of Personality and Social Psychology* 94: 382-395.

Fischer, Peter; Stefan Schulz-Hardt; and Dieter Frey. 2008. "Selective Exposure and Information Quantity: How Different Information Quantities Moderate Decision Makers' Preference for Consistent and Inconsistent Information" *Journal of Personality and Social Psychology* 94: 231-244.

Fishbach, Ayelet, Ravi Dhar, and Ying Zhang. 2006. "Subgoals and Substitutes or Complements: The Role of Goal Accessibility." *Journal of Personality and Social Psychology* 91: 232-242.

Folger, Robert. 1977. "Distributive and Procedural Justice: Combined Impact of 'Voice' and Improvement on Experienced Inequity." *Journal of Personality and Social Psychology* 35: 108-119.

Forsterling, Friedrich, Sandra Preikschas, and Maria Agthe. 2007. "Ability, Luck, and Looks: An Evolutionary look at Achievement Ascriptions and the Sexual Attribution Bias." *Journal of Personality and Social Psychology* 92: 775-788.

Frank, Bjorn and Gunther Schulze. 2000. "Does Economics Make Citizens Corrupt?" *Journal of Economic Behavior and Organization* 43: 101-113.

Frank, Robert, Thomas Gilovich, and Dennis Regan. 1993. "Does Studying Economics Inhibit Cooperation?" *Journal of Economic Perspectives* 7: 159-171.

Frank, Robert, Thomas Gilovich, and Dennis Regan. 1996. "Do Economists Make Bad Citizens?" *Journal of Economic Perspectives* 10: 187-192.

Fu, Jeanne Ho-ying, Michael W. Morris, Sau-lai Lee, Melody Chao, Chi-yue Chiu, and Ying-yi Hong. 2007. "Epistemic Motives and Cultural Conformity: Need for Closure, Culture, and Context as Determinants of Conflict Judgments" *Journal of Personality and Social Psychology* 92: 191-207.

Gailliot, Matthew T., Roy F. Baumeister, C. Nathan DeWall, Jon K. Maner, E. Ashby Plant, Dianne M. Tice, Lauren E. Brewer, and Brandon J. Schmeichel. 2007. "Self-Control Relies on

Glucose as a Limited Energy Source: Willpower is More Than a Metaphor.” *Journal of Personality and Social Psychology* 92: 325-336.

Gelfand, Michele J., Marianne Higgins, Lisa H. Nishii, Jana L. Raver, Alexandria Dominguez, Fumio Murakami, Susumu Yamaguchi, and Midori Toyama. 2002. “Culture and Egocentric Perceptions of Fairness in Conflict and Negotiation.” *Journal of Applied Psychology* 87: 833-845.

Graziano, William G., Meara M. Habshi, Brad E. Sheese, and Renee M. Tobin. 2007. “Agreeableness, Empathy, and Helping: A Person x Situation Perspective.” *Journal of Personality and Social Psychology* 93: 583-599.

Greenberg, Jerald and Robert Folger. 1983. “Procedural Justice, Participation, and the Fair Process Effect in Groups and Organizations.” Pp. 235-256 in *Basic Group Processes*, edited by P. B. Paulus. New York: Springer-Verlag.

Griskevicius, Vladas, Robert B. Cialdini, and Douglas T. Kendrick. 2006. “Peacocks, Picasso, and Parental Investment: The Effects of Romantic Motives on Creativity.” *Journal of Personality and Social Psychology* 91: 63-76.

Griskevicius, Vladas, Noah J. Goldstein, Chad R. Mortensen, Robert B. Cialdini, and Douglas T. Kendrick. 2006. “Going Among Versus Going Alone: When Fundamental Motives Facilitate Strategic (Non)Conformity.” *Journal of Personality and Social Psychology* 91: 281-294.

Griskevicius, Vladas, Joshua M. Tybur, Jill M. Sundie, Robert B. Cialdini, Geoffrey F. Miller, and Douglas T. Kendrick. 2007. “Blatant Benevolence and Conspicuous Consumption: When Romantic Motives Elicit Strategic Costly Signals.” *Journal of Personality and Social Psychology* 93: 85-102.

Guimond, Serge, Guy Begin, and Douglas L. Palmer. 1989. "Education and Causal Attributions – The Development of Person-Blame and System-Blame Ideology." *Social Psychology Quarterly* 52: 126-140.

Guimond, Serge and Douglas L. Palmer. 1990. "Type of Academic Training and Causal Attributions for Social Problems." *European Journal of Social Psychology* 20: 61-75.

Hastie, Brianne. 2007a. “Cold Hearts and Bleeding Hearts: Disciplinary Differences in University Students’ Sociopolitical Orientations” *Journal of Social Psychology* 147: 211-241.

Hastie, Brianne. 2007b. "Higher Education and Sociopolitical Orientation: The Role of Social Influence in the Liberalisation of Students." *European Journal of Psychology of Education* 22: 259-274.

Hegtvedt, Karen A and Barry Markovsky. 1995. “Justice and injustice.” Pp 257-280 in *Sociological Perspectives on Social Psychology*, edited by Karen S. Cook, Gary A. Fine, and James House. Boston: Allyn Bacon.

- Hegtvedt, Karen A., Elaine A. Thompson, and Karen S. Cook. 1993. "Power and Equity: What Counts in Attributions for Exchange Outcomes?" *Social Psychology Quarterly* 56: 100-119.
- Henderson, Marlone D., Kentaro Fujita, Yaacov Trope, and Nira Liberman. 2006. "Transcending the "Here": The Effect of Spatial Distance on Social Judgment." *Journal of Personality and Social Psychology* 91: 845-856.
- Henderson, Marlone; Yaacov Trope, and Peter Carnevale. 2006. "Negotiation From a Near and Distant Time Perspective." *Journal of Personality and Social Psychology* 91: 712-729.
- Hirschberger, Gilad. 2006. "Terror Management and Attributions of Blame to Innocent Victims: Reconciling Compassionate and Defensive Responses." *Journal of Personality and Social Psychology* 91: 832-844.
- Homans, George C. [1961] 1974. *Social Behavior: Its Elementary Forms*. New York: Harcourt Brace Jovanovich.
- James, Tammy, Lewis Soroka, and John G. Benjafield. 2001. "Are Economists Rational, or Just Different?" *Social Behavior and Personality* 29: 359-364.
- Jasso, Guillermina. 1978. "On the Justice of Earnings: A New Specification of the Justice Evaluation Function." *American Journal of Sociology* 83:1398-1419.
- Jasso, Guillermina and Murray Webster Jr. 1997. "Double Standards in Just Earnings for Male and Female Workers." *Social Psychology Quarterly* 60: 66-78.
- Karambayya, Rekha and Jeanne M. Brett. 1989. "Managers Handling Disputes: Third-Party Roles and Perceptions of Fairness." *The Academy of Management Journal* 32: 687-704.
- Koo, Minjung and Ayelet Fishbach. 2008. "Dynamics of Self-Regulation: How (Un)accomplished Goal Actions Affect Motivation" *Journal of Personality and Social Psychology* 94: 183-195.
- Kray, Laura J., Adam D. Galinsky, and Elaine M. Wong. 2006. "Thinking Within the Box: The Relational Processing Style Elicited by Counterfactual Mind-Sets." *Journal of Personality and Social Psychology* 91: 33-48.
- Ku, Gillian; Adam D. Galinsky; and J. Keith Murnighan. 2006. "Starting Low but Ending High: A Reversal of the Anchoring Effect in Auctions." *Journal of Personality and Social Psychology* 90: 975-986.
- Leary, Mark R., Eleanor B. Tate, Claire E. Adams, Ahsley Batts Allen, and Jessica Hancock. 2007. "Self-Compassion and Reactions to Unpleasant Self-Relevant Events: The Implications of Treating Oneself Kindly." *Journal of Personality and Social Psychology* 92: 887-904.

Lind, E. Allan and Tom R. Tyler. 1988. *The Social Psychology of Procedural Justice*. New York: Plenum.

Louro, Maria J., Rik Pieters, and Marcel Zeelenberg. "Dynamics of Multiple-Goal Pursuit" *Journal of Personality and Social Psychology* 93: 174-193.

Lovaglia, Michael, Richard Harris, Shane D. Soboroff, Christopher P. Kelley, Christabel L. Rogalin, and Jeffrey W. Lucas. 2008. "Age-Gender Interaction in Leader Assessment: The Importance of Experience." *Pacific Sociological Association Annual Meetings*. Portland, OR.

Mallett, Robyn K., Timothy D. Wilson, and Daniel T. Gilbert. 2008. "Expect the Unexpected; Failure to Anticipate Similarities Leads to an Intergroup Forecasting Error." *Journal of Personality and Social Psychology* 94: 265-277.

Marwell, Gerald, and Ruth E. Ames 1981. "Economists Free Ride, Does Anyone Else? Experiments on the Provision of Public Goods IV." *Journal of Public Economics* 15:295-310.

Michener, H. Andrew, John D. DeLamater and Daniel J. Myers. 2004. *Social Psychology*, 5th Edition. Belmont, CA: Wadsworth/Thompson Learning.

Molm, Linda D., Jessica L. Collett, and David Schaefer. 2006. "Conflict and Fairness in Social Exchange." *Social Forces* 84: 2331-2352.

Morrison, Kimberly Rios and Dale T. Miller. 2008. "Distinguishing Between Silent and Vocal Minorities: Not All Deviants Feel Marginal." *Journal of Personality and Social Psychology* 94: 871-882.

Nelson, Steven M. 2006. "Redefining a Bizarre Situation: Relative Concept Stability in Affect Control Theory." *Social Psychology Quarterly* 69:215-234. Newcomb, T.M. [1943] 1957. *Personality and Social Change: Attitude Formation in a Student Community*. New York: Dryden Press.

Norgren, Loran F., Joop van der Pligt, and Frenk van Harreveld. 2007. "Evaluating Eve: Visceral States Influence the Evaluation of Impulsive Behavior" *Journal of Personality and Social Psychology* 93: 75-84.

Oishi, Shigehiro, Ulrich Schimmack, Ed Diener, Chu Kim-Prieto, Christie Napa Scollon, and Dong-Won Choi. 2007. "The Value-Congruence Model of Memory for Emotional Experiences: An Explanation for Cultural Differences in Emotional Self-Reports." *Journal of Personality and Social Psychology* 93: 897-90.

Olson, Kristina, Yarrow Dunham, Carol S. Dweck, Elisabeth S. Spelke, and Mahzarin R. Banahi. 2008. "Judgments of the Lucky Across Development and Culture." *Journal of Personality and Social Psychology* 94: 757-776.

- Organ, Dennis W. and Robert H. Moorman. 1993. "Fairness and Organizational Citizenship Behavior: What are the Connections?" *Social Justice Research* 6: 5-18.
- Pascarella, Ernest T. and Patrick T. Terenzini 1991. *How College Affects Students: Findings and Insights From Twenty Years of Research*. San Francisco: Jossey-Bass.
- Peters, Kim and Yoshihisa Kashima. 2007. "From Social Talk to Social Action: Shaping the Social Triad with Emotion Sharing." *Journal of Personality and Social Psychology* 93: 780-797.
- Pronin, Emily, Jonah Berger, and Sarah Molouki. 2007. "Alone in a Crowd of Sheep: Asymmetric Perceptions of Conformity and Their Roots in an Introspection Illusion." *Journal of Personality and Social Psychology* 92: 585-595.
- Risen, Jane L. and Thomas Gilovich. 2007. "Target and Observer Differences in the Acceptance of Questionable Apologies." *Journal of Personality and Social Psychology* 92: 418-433.
- Sagi, Adi and Nehemia Friedland. 2007. "The Cost of Richness: The Effect of the Size and Diversity of Decision Sets on Post-Decision Regret" *Journal of Personality and Social Psychology* 93: 515-524.
- Scheepers, Daan, Russell Spears, Bertjan Doosje, and Antony S. R. Manstead. 2006. "Diversity in In-Group Bias: Structural Factors, Situational Features, and Social Functions." *Journal of Personality and Social Psychology* 90: 944-960.
- Shelly, Robert K. 2001. "How Performance Expectations Arise from Sentiments." *Social Psychology Quarterly* 64: 72-87.
- Shnabel, Nurit and Arie Nadler. 2008. "A Needs-Based Model of Reconciliation: Satisfying the Differential Emotional Needs of Victim and Perpetrator as a Key to Promoting Reconciliation." *Journal of Personality and Social Psychology* 94: 116-132.
- Skarlicki, Daniel P. and Robert Folger. 1997. "Retaliation in the Workplace: The Roles of Distributive, Procedural, and Interactional Justice." *Journal of Applied Psychology* 82: 434-443.
- Stephens, Nicole M., Hazel Rose Markus, and Sarah S. M. Townsend. 2007. "Choice as an Act of Meaning: The Case of Social Class." *Journal of Personality and Social Psychology* 93: 814-830.
- Stolte, John F. and Shanon Fender. 2007. "Framing Social Values: An Experimental Study of Culture and Cognition" *Social Psychology Quarterly* 70: 59-69.
- Tamir, Maya, Oliver P. John, Sanjay Srivastava, and James J. Gross. 2007. "Implicit Theories of Emotion: Affective and Social Outcomes across a Major Life Transition." *Journal of Personality and Social Psychology* 92: 731-744.

Thibaut, John W. and Laurens Walker. 1975. *Procedural Justice: A Psychological Analysis*. Hillsdale, NJ: Erlbaum.

Tracy, Jessica L. and Richard W. Robins. 2007. "The Psychological Structure of Pride: A Tale of Two Facets." *Journal of Personality and Social Psychology* 92: 506-525.

Turan, Bulent and Leonard M. Horowitz. "Can I Count on You to Be There for Me? Individual Differences in a Knowledge Structure." *Journal of Personality and Social Psychology* 93: 447-465.

Weaver, Kimberlee, Stephen M. Garcia, Norbert Schwarz, and Dale T. Miller. 2007. "Inferring the Popularity of an Opinion From Its Familiarity: A Repetitive Voice Can Sound Like a Chorus." *Journal of Personality and Social Psychology* 92: 821-833.

Willer, David and Henry A. Walker. 2007. *Building Experiments: Testing Social Theory*. Stanford, CA: Stanford University.

Yezer, Anthony, Robert Goldfarb, and Paul Poppen. 1996. "Does Studying Economics Discourage Cooperation? Watch What We Do, Not What We Say or How We Play." *Journal of Economic Perspectives* 10: 177-186.

APPENDIX A: Vignette Studies with Undergraduates, by Topic & Sources of Respondents

Topics	Respondents	References
<i>Self and Identity</i>		
	General/Unspecified Students	Gailliot et al. 2007; Koo and Fishbach 2008; Shnabel and Nadler 2008; Tamir et al. 2007
<i>Social Perception and Cognition</i>		
	Psychology Courses	Fischer, Schultz-Hardt, and Frey 2008; Fosterling, Preikschas, and Agthe 2007; Leary et al. 2007
	Sociology Courses	Nelson, 2006*
	Nursing Courses	Sagi and Friedland 2007
	Business Courses	Kray, Galinsky and Wong 2006; Ku, Galinsky and Murnighan 2006
	General/Unspecified Students	Chun and Kruglanski 2006; DeWall and Baumeister 2006; Fishbach, Dhar, and Zhang 2006; Hirschberger 2006; Henderson, Trope, and Carnevale 2006; Kray, Galinsky, and Wong 2006; Louro, Pieters, and Zeelenberg 2007; Stolte and Fender 2007*; Sagi and Friedland 2007
<i>Attitudes</i>		
	Psychology Courses	Bain, Kashima, and Haslam 2006; Cohen et al. 2007; Fischer, Greitemeyer, and Frey 2008; Tracy and Robins 2007
	General/Unspecified Students	Fischer, Greitemeyer, and Frey 2008; Fischer and Roseman 2007
<i>Symbolic Communication and Language</i>		
	Psychology Courses	Oishi et al. 2007
	General/Unspecified Students	Kim and Kashima 2007; Risen and Gilovich 2007
<i>Self-Presentation and Impression Management</i>		
	Psychology Courses	Griskevicius et al. 2006; Risen and Gilovich 2007
	General/Unspecified Students	Risen and Gilovich 2007
<i>Helping and Altruism</i>		
	Psychology Courses	Exline et al. 2008; Graziano et al. 2007
	General/Unspecified Students	Norgren, van der Pligt, and van Harreveld 2007
<i>Interpersonal Attraction and Relationships</i>		
	Psychology Courses	Griskevicius et al. 2007; Griskevicius, Cialdini, and Kendrick 2006; Turan and Horowitz, 2007;
	General/Unspecified Students	Boyes and Fletcher 2007; Bartz and Lydon 2006
<i>Group Cohesion and Conformity</i>		
	General/Unspecified Students	Weaver et al. 2007; Fu et al. 2007; Prinin, Berger, and Molouki 2007
<i>Group Structure and Performance</i>		
	Psychology Courses	Scheepers et al. 2006
<i>Intergroup Conflict</i>		
	General/Unspecified Students	Mallett, Wilson, and Gilbert 2008
<i>Social Structure and Personality</i>		
	General/Unspecified Students	Stephens, Markus, and Townsend 2007
<i>Deviant Behavior and Social Reaction</i>		
	General/Unspecified Students	Morrison and Miller 2008

Notes: These headings are from the headings of a popular Social Psychology textbook (Michener, DeLamater, & Myers 2004). Some references appear under multiple topics or with multiple sources of respondents, reflecting these articles' research topics and designs. * = Articles from *Social Psychology Quarterly*

APPENDIX B: Vignettes

The beginning and end of all of the vignettes were the same, but the middle differed slightly. Below is the text of the vignette, with the three variations labeled.

[All] You and Taylor have been in business for three years. It is not working out and you are both ready to move on to new business ventures. There are a number of assets (e.g. supplies, parts) left from the business to divide between you. You feel that you have contributed more to the business and deserve a larger share than Taylor. Taylor believes the opposite and is asking for a larger share. It is important to you that you accumulate as many assets as possible because you plan on trading your assets in for their cash value at the end of the division process. You will use the cash to begin your next business venture. You are unsure of Taylor's future plans and do not know if they include trading the assets for cash or using them in the future.

[Negotiation vignette] To divide these various assets, you and Taylor engage in a negotiation process. You divide the assets one at a time until all of them have been liquidated. In this negotiation process you and Taylor exchange offers (e.g. how many sprockets you get, how many Taylor gets). After considering the offers, you each make counteroffers. These offers and counteroffers continue until the two of you agree on a division of the asset. This decision is final, and the asset is divided accordingly. This process begins again with each new asset and the negotiations continue until you and Taylor have divided all the assets.

[Mediation vignette] To divide these various assets, you and Taylor engage in a mediation process. You divide the assets one at a time, with the help of a mediator, until all of them have been liquidated. In this mediation process you and Taylor make offers (e.g. how many sprockets you get, how many Taylor gets) to a mediator. The mediator relays your offers to Taylor and Taylor's offers to you. After considering the offers, you each make counteroffers. These offers and counteroffers continue through the mediator until the mediator announces that the two of you agree on a division of the asset. This decision is final, and the asset is divided accordingly. This process begins again with each new asset and the negotiations continue until you and Taylor, with the help of the mediator, have divided all the assets.

[Arbitration vignette] To divide these various assets, you and Taylor engage in an arbitration process. You divide the assets one at a time, with the help of an arbitrator, until all of them have been liquidated. In this arbitration process you and Taylor make offers (e.g. how many sprockets you get, how many Taylor gets) to an arbitrator. After considering both offers, the arbitrator decides on a division of the asset. The arbitrator's decision is final and the asset is divided accordingly. This process begins again with each new asset and the negotiations continue until you and Taylor, with the help of the arbitrator, have divided all the assets.

[All] At the end of the [negotiation/arbitration/mediation] process you add up your assets and compute their value, preparing to trade them in. Taylor decides to do the same. You compare the value of your assets to the value of Taylor's accumulated assets and realize that you received less than half the total value of the assets. You acquired only 42% of the value. Taylor on the other hand, has 58%.

APPENDIX C: Descriptive Statistics

Variable	N	Mean	s.d.
Procedure			
<i>Fair</i>	239	4.22	1.70
<i>Just</i>	239	4.34	1.68
<i>Scale</i>	239	4.28	1.62
Outcome			
<i>Fair</i>	239	3.02	1.50
<i>Just</i>	239	3.53	1.54
<i>Scale</i>	238	3.27	1.26
Taylor			
<i>Fair</i>	239	4.07	1.49
<i>Reasonable</i>	238	4.32	1.46
<i>Scale</i>	238	4.20	1.37
Third Party			
<i>Fair</i>	159	4.60	1.65
<i>Reasonable</i>	159	3.32	1.69
<i>Scale</i>	159	3.96	0.59

Correlations of Variables

	Procedure		Outcome		Taylor		Third Party	
	<i>Fair</i>	<i>Just</i>	<i>Fair</i>	<i>Just</i>	<i>Fair</i>	<i>Reasonable</i>	<i>Fair</i>	<i>Reasonable</i>
Procedure								
<i>Fair</i>	1.00							
<i>Just</i>	0.83	1.00						
Outcome								
<i>Fair</i>	0.53	0.45	1.00					
<i>Just</i>	0.39	0.42	0.56	1.00				
Taylor								
<i>Fair</i>	0.36	0.43	0.43	0.32	1.00			
<i>Reasonable</i>	0.31	0.33	0.38	0.29	0.69	1.00		
Third Party								
<i>Fair</i>	-0.58	-0.54	-0.37	-0.32	-0.26	-0.30	1.00	
<i>Reasonable</i>	-0.58	-0.59	-0.39	-0.30	-0.39	-0.39	0.75	1.00

Correlations of Scales

	Procedural Fairness	Distributive Fairness	Taylor Interactional Fairness	Third Party Interactional Fairness
Procedural	1.00			
Distributive	0.57	1.00		
Taylor Interactional	0.41	0.45	1.00	
Third Party Interactional	-0.06	-0.04	-0.19	1.00

AUTHOR’S NOTE

* This research was supported by a faculty research grant from the Office of Research at the University of Notre Dame to the first author. We gratefully acknowledge the University of Notre Dame’s support. Direct all correspondence to Jessica L. Collett, Department of Sociology, University of Notre Dame, 810 Flanner Hall, Notre Dame, IN 46556. Email: jlcollett@nd.edu.

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