

Automatic Ethics: The Effects of Implicit Assumptions and Contextual Cues on Moral Behavior

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We empirically examine the reflexive or automatic aspects of moral decision making. To begin, we develop and validate a measure of an individual's implicit assumption regarding the inherent morality of business. Then, using an in-basket exercise, we demonstrate that an implicit assumption that business is inherently moral impacts day-to-day business decisions and interacts with contextual cues to shape moral behavior. Ultimately, we offer evidence supporting a characterization of employees as reflexive interactionists: moral agents whose automatic decision-making processes interact with the environment to shape their moral behavior.

Keywords: automatic social cognition, moral decision making, moral behavior

Scholars and practitioners alike have argued that moral and ethical behavior is critical to long-term survival (Donaldson, 2003; George, 2007; Godfrey, 2005).¹ As a result, more and more research is exploring why employees behave morally and immorally (Treviño, Weaver, & Reynolds, 2006). Research in this area has traditionally focused on the rational and deliberate aspects of moral decision making (Jones, 1991; Kohlberg, 1981; Rest, 1986), but in recent years scholars have paid more attention to the reflexive, automatic, and intuitive aspects of morality (Haidt, 2001; Reynolds, 2006). As work in this area progresses, one major hurdle has become apparent. Despite strong theoretical arguments for the relationship between automatic processes and moral behavior, there is no direct empirical evidence of this relationship. Furthermore, though many have acknowledged that organizations can play an important role in shaping automatically driven moral behavior (e.g., Ashforth & Anand, 2003; Banaji, Bazerman, & Chugh, 2003; Bandura, 1997; Chugh, 2004; Chugh, Banaji, & Bazerman, 2005; Sonenshein, 2007), these discussions have been relatively abstract and inferential in nature. No research has empirically examined how an organization might affect the relationship between an individual's automatic decision-making process and the individual's moral behavior.

The purpose of this research is thus twofold. First, we draw from literatures on moral decision making and automatic social cognition to develop a measure of one specific element of an individual's automatic processing system: an implicit assumption about the moral nature of business. Second, we develop a characterization of employees as reflexive interactionists, moral agents whose automatic decision-making processes interact with contextual factors to influence their moral behavior, and empirically demonstrate that an implicit assumption about the moral nature of business can interact with contextual cues to shape moral behavior. Ultimately, this research extends current research in moral decision making (Reynolds, 2006; Sonenshein, 2007) and automatic social cognition (Greenwald, McGhee, & Schwartz, 1998) and generates practical implications for improving individual behavior in organizations.

Automatic Social Cognition and Moral Decision Making

The literature on automatic (or implicit) social cognition is predicated upon the argument that social judgments are rapidly constructed from past experience in a process that is automatic and without conscious deliberation (Bargh & Chartrand, 1999; Bargh, Gollwitzer, Lee-Chai, Barndollar, & Troetschel, 2001). In this literature, automatic or implicit cognitive processing is described as nonconscious processing of information such that "introspectively unidentified (or inaccurately identified) traces of past experience mediate attributions" made in current exchanges (Greenwald & Banaji, 1995, p. 15). In other words, individuals approach even the most novel social situations informed by underlying experience. This experience is stored in what are referred to as knowledge structures, schematic mental structures that describe

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¹ We consider the terms *moral* and *ethical* to be synonymous.

relationships between concepts (Greenwald et al., 1998). The term *implicit association* refers generically to any association of this type. In recent years, scholars have distinguished between different kinds of implicit associations, including implicit attitudes (e.g., Greenwald et al., 1998), implicit stereotypes (Greenwald, Oakes, & Hoffman, 2003), implicit self-esteem, and implicit self-concept (Greenwald & Farnham, 2000). Leavitt, Fong, and Greenwald (2007) recently argued that implicit assumptions are associations between concepts (e.g., work and prestige). In this view, such associations represent the degree of mental “closeness” of concepts and constitute an assumption of abstract relatedness. Though implicit assumptions may be taken for granted by the individual, they represent the basic unit of understanding that allows for day-to-day behavior.

Implicit associations are both theoretically and empirically distinct from explicit attitudes. Explicit attitudes are beliefs and opinions developed through cognitive deliberation. Individuals are self-aware of such attitudes and beliefs, which thus can be captured through self-report measures. In contrast, implicit associations are mental representations that allow for automatic responses to experience; they are activated without conscious effort by exposure to strongly associated stimuli (Bargh, 2006). Given this, implicit associations are especially sensitive to cultural context and often reflect culturally pervasive themes (Banaji, 2001).

It is theorized that implicitly associated concepts are frequently activated by one another and that the consequent accessibility of these “related” categories informs judgments, intentions, and behavior outside of conscious awareness (Greenwald & Banaji, 1995; Greenwald et al., 2002). Indeed, empirical work has repeatedly demonstrated that implicit associations, assumed or measured, can affect behavior (Bargh, 1997; Bargh, Chen, & Burrows, 1996; Dijksterhuis & Bargh, 2001; Kay, Wheeler, Bargh, & Ross, 2004; Uhlmann, Poehlman, & Bargh, 2007). Scholars have argued that automatically driven behaviors are most apparent in situations where norms of behavior are relatively ambiguous or poorly structured (e.g., Greenwald, Uhlmann, Poehlman, & Banaji, 2009). Given these conditions, we believe, implicit associations are relevant to the study of moral decision making.

Philosophers have theorized about the processes of moral decision making for centuries (Singer, 1994). With a few important exceptions (e.g., Hume, 1983/1751), rational thought has taken a primary and dominant position in this literature (Haidt, 2001). Scholars have recently drawn from writings in moral philosophy on moral intuition (e.g., Kant, 1785/1994; Ross, 1930) and burgeoning physiological and clinical research in the area (e.g., Greene & Haidt, 2002) to suggest that moral decision making is also impacted, if not dominated, by reflexive or automatic cognitive processes (Haidt, 2001; Reynolds, 2006). Reynolds (2006) argued that moral intuition is a result of the fact that an individual’s descriptive knowledge of any given moral situation is intertwined with normative assessments of that situation. In terms of the automatic social cognition literature, these normative valuations would be manifest as implicit associations between concepts (e.g., bribery) and their normative valence (e.g., immoral).

Whereas there are perhaps innumerable concepts that can intersect with the moral domain, in this research we chose to examine the individual’s nonconscious normative valuation of business. We chose business because the concept is very general and common and is germane to anyone who encounters moral issues at work. As

such, the implications of any findings could be quite generalizable and could pave a path for similar research on more specific concepts. In the following section, we consider implicit assumptions about the moral nature of business and develop hypotheses about how such beliefs can shape behavior.

An Implicit Assumption About the Moral Nature of Business

Business is a generic concept that in colloquial language represents a conglomeration of objects, people, activities, and institutions. Though individual understandings of business vary in minor details, at an abstract level everyone holds a general understanding of what business represents. Furthermore, business is generally linked to a particular set of norms and principles. As several management scholars have suggested (Ghoshal & Moran, 1996; Morrison & Milliken, 2000; Pfeffer, 1997), business is associated with an economic paradigm that emphasizes competition, fiduciary responsibilities, maximizing shareholder returns, and other traditional, economics-minded, capitalistic values and behaviors (e.g., Friedman, 1962).

We suggest that beyond holding just a simple description of what business represents, individuals also hold a normative valuation (make a normative association) of business such that it is implicitly assumed to be inherently moral or immoral (Reynolds, 2006). As Suchman (1995) argued, morality is an aspect of legitimacy. Thus, an implicit assumption that business is inherently moral would reflect a belief that the predominant economic paradigm with which business is associated is morally valid and thus legitimate (Pfeffer, 1981; Pfeffer & Salancik, 1978). So the person who believes that business is inherently moral (legitimate) would believe that business should be an exercise in intense competition emphasizing shareholder obligations, financial performance, and other traditionally capitalistic practices. In contrast, an implicit belief that business is immoral would reflect a view that traditional business norms and practices are perhaps unwarrantedly aggressive and even harmful. As a result, those who hold an implicit assumption that business is immoral would be more leery of the traditional, economics-minded, capitalistic business paradigm and would instead lean toward more collaborative and more people-oriented views, values, and beliefs (e.g., Freeman, 1984). Thus, we offer the following:

Hypothesis 1: An implicit assumption that business is moral will be positively associated with traditional, economics-minded, capitalistic values and beliefs.

We believe that this implicit assumption will be associated with definitively moral behaviors (Jones, 1991) in addition to individual values and beliefs. Empirical evidence of a link between elements of the traditional, economic paradigm and immoral behavior can be found in research on deliberate moral decision making. For example, Kish-Gephart, Harrison, and Treviño’s (2010) meta-analysis suggests that Machiavellianism, an individual trait that emphasizes competition and self-advancement, is associated with immoral behavior. In other research, the traditional, economic paradigm is often represented as a more realistic and less idealistic view of the world, and research has demonstrated that realism is associated with immoral behavior whereas idealism is associated with moral behavior (O’Fallon & Butterfield, 2005).

Though a link between an implicit belief about the moral nature of business and moral behavior may exist, current theory suggests that such a link requires a contextual cue in order for the association to become salient (Greenwald & Banaji, 1995; Greenwald et al., 2002). By definition, a contextual cue refers to the message imbued in a discernible element of the environment (Weick, 1995). A contextual cue can convey a great deal of information, and the relevance of any single piece of information to automatically driven behavior is a function of the extent to which the information taps into existing associations (Greenwald & Banaji, 1995; Greenwald et al., 2002). Thus, to the extent that a cue is salient to an existing implicit association, it can activate the association and initiate a behavioral response. In this research, we focus on the extent to which a cue communicates key concepts of the predominant economic and capitalistic paradigm of business (e.g., competition, stockholders) as opposed to concepts that contrast such a view (e.g., collaboration, nonowner stakeholders). We argue that if an individual implicitly believes that business is inherently moral and is provided cues by the context that are consistent with this implicit assumption, that belief will become salient to the individual and the individual will engage in behaviors consistent with that paradigm. Moreover, the cues will strengthen the implicit belief's influence upon the associated behaviors. As a result, competitive tendencies can become ultracompetitive behaviors; a preference for shareholders can become an overemphasis on shareholders; and capitalistic tendencies can be taken to more extreme conclusions. In many cases, these points of excess will constitute immoral behavior. We expected that those who implicitly assume that business is immoral and are provided cues consistent with that implicit association would become increasingly less likely to engage in these kinds of behaviors and would thus be less likely to act immorally.

Empirical findings support an interactionist view of automatic moral behavior. A host of research supports the general proposition that individual behavior is shaped by the interaction between individuals and their environments (Bandura, 1986; Chatman, 1989; Schneider, 1983), and this view has been repeatedly confirmed in the ethics literature (Ford & Richardson, 1994; Treviño et al., 2006). With regard to specific contextual cues, we fully expected explicit cues to activate these implicit beliefs, but research has shown that individual business behaviors can also be influenced by subtle contextual cues such as the placement of a briefcase in a visible location (Kay et al., 2004). Thus, we characterize employees as reflexive interactionists, moral agents whose moral behavior is shaped by the interplay between their implicit assumptions about morality and the contextual cues, both explicit and subtle, that pertain to moral behavior they receive.

Hypothesis 2: Implicit assumptions will interact with contextual cues to shape moral behavior such that an implicit assumption that business is moral and a competitive cue will result in the most immoral behavior in business-related tasks.

Study 1

We designed Study 1 to achieve two purposes. First, we sought empirical evidence of the validity of an Implicit Association Test (IAT) that measures individual implicit assumptions about the morality of business. Second, we intended to test Hypothesis 1.

Method

Sample and procedure. Participants were intentionally drawn from two demographically distinct pools. The first pool was an undergraduate environmental business strategy class at a large midwestern university. The second was an online forum on mountain biking. Thirty-five students and 24 forum members completed the instrument. Forum membership can vary on a daily basis, but we estimate that this represents approximately a 40% response rate. As expected, the groups were statistically different in terms of age, $F(1, 57) = 147.55, p = .00$, Cohen's $d = 2.89$; full-time work experience, $F(1, 57) = 294.46, p = .00$, Cohen's $d = 4.29$; and political party affiliation, $F(1, 57) = 14.01, p = .00$, Cohen's $d = 0.94$. In the combined sample, 53% were female and 88% were Caucasian; 61% were under 25 and 3% were over 55. At least 66% reported 1 year or more of full-time work experience.

Measures.

Independent variable. An implicit assumption about the moral nature of business was measured with a web-based version of Greenwald and colleagues' IAT method (Greenwald et al., 1998, 2002). The IAT is a computer exercise built upon an observation that tasks requiring responses to incompatible or unassociated categories require slightly more time than identical tasks requiring responses to compatible or associated categories. For a full discussion and meta-analysis of the IAT, please see Greenwald et al. (2009).

In this IAT, the primary concept categories were business and sports, and the secondary concept categories were ethical and unethical. As per the developed IAT methodology, the control category sports was used as an arithmetic control parceling out participants' tendency to associate a similarly familiar category with ethical versus unethical behavior (Greenwald et al., 1998). Sports was chosen as the control category for two reasons. First, the features of sports are highly analogous to those of business (e.g., supervisors are similar to coaches). Second, sports and business share ideals about fair play and competition, and recent media exposure has made moral conduct salient in both domains. Twenty-four conceptually comparable terms were generated for categorization, six for each category (see Table 1).

To score the measure, we used the Greenwald improved D algorithm (see Greenwald, Nosek, and Banaji, 2003, for a complete description), which produces a standardized difference score. A score of zero suggests no relative difference between the strength of association between the concepts of business and ethical and business and unethical. Positive scores suggest a stronger association between business and ethical, and negative scores suggest a stronger association between business and unethical. The algorithm accounts for time necessary to recover from errors and removes trials on which participant response is faster than 300 ms or slower than 3,000 ms. In this sample, a normal distribution with variance between subjects ($M = -.02, SD = .41, \text{range} = -.73 \text{ to } .97$) indicated an individual difference in implicit cognitive structures (Greenwald et al., 1998). We also computed three sub-D scores for each participant using one third of the trials (Greenwald & Farnham, 2000). Results ($\alpha = .77$) indicated that participants responded consistently throughout the task, and thus we considered the measure to be internally reliable.

To provide evidence of the IAT measure's construct validity, we gathered three direct measures. First, we asked participants

Table 1
IAT Categories and Terms

	Categories ^a			
	Business	Sports	Ethical	Unethical
Terms	Boardroom	Locker room	Giving	Stealing
	CEO	Coach	Being honest	Lying
	Customers	Fans	Helping	Hurting others
	Corporation	Stadium	Being fair	Cheating
	Profits	Trophy	Following rules	Breaking rules
	Sales	Athlete	Considering others	Insulting others

Note. IAT = Implicit Association Test.

^a Pairings (random ordering): (a) business/ethical and sports/unethical; (b) business/unethical and sports/ethical.

“Which response best describes your ‘gut reaction’ to the word ‘business’?” (1 = *very good*, 5 = *very bad*; $M = 2.78$, $SD = 0.89$). The implicit belief was correlated as expected with this response ($r = -.26$, $p < .05$). Second, we asked, “Which statement best captures what you believe?” (1 = *cheating is more prevalent in sports than in business*, 5 = *cheating is more prevalent in business than in sports*; $M = 3.53$, $SD = 0.70$). As expected, the implicit belief was negatively correlated with this response ($r = -.27$, $p = .04$). Third, we asked, “Which statement best captures what you believe?” (1 = *business is much more ethical than sports*, 5 = *sports is much more ethical than business*; $M = 3.58$, $SD = 0.91$). As expected, the implicit belief was negatively correlated with this response ($r = -.44$, $p = .00$).

Dependent variables. We utilized two measures of traditional, economics-minded, capitalistic values and beliefs. First, using an approach developed by Reynolds, Schultz, and Hekman (2006), we asked participants, “In general, how much consideration do you think managers should give the following six (6) groups?” We listed six major stakeholder groups (e.g., customers, employees) and asked participants to distribute 100 points among the groups.

Traditional, economics-minded, capitalistic values and beliefs were measured as the amount of points distributed to the shareholders/owners.

Second, we employed Mehrabian’s (1996) 20-item measure of libertarianism. The items (e.g., “We need a stronger government to create a better society,” “Our society can improve only with more government controls over individuals and businesses”); 1 = *strongly disagree*, 7 = *strongly agree*) assess the extent to which an individual values personal freedom and the principles of a free market. We associated more libertarian views with traditional, economics-minded, capitalistic values and beliefs. The measure demonstrated high reliability ($\alpha = .93$).

Results

Means, standard deviations, and a correlation matrix of the variables are presented in Table 2. Hypothesis 1 held that the implicit assumption would be positively associated with traditional, economics-minded, capitalistic values and beliefs. Results of linear regression (see Table 3) showed that the implicit assump-

Table 2
Means, Standard Deviations, and Correlation Matrix of Variables in Study 1

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9	10	11
1. Implicit assumption ^a	-0.02	0.41	—										
2. Age (categorical)	1.81	1.17	.29*	—									
3. Gender	0.47	0.50	.10	.27	—								
4. Caucasian (dummy)	0.88	0.33	.22	-.01	.14	—							
5. Full-time experience (categorical)	3.15	2.18	.08	.80**	.36**	.17	—						
6. Political affiliation	1.21	0.40	.21	.48**	.45**	.19	.48*	—					
7. “Business is bad”	2.78	0.89	-.26*	-.22	-.19	.09	-.11	-.38**	—				
8. “Cheating is more prevalent in business than in sports”	3.53	0.70	-.27*	-.40**	-.23	-.10	-.35**	-.32*	.43**	—			
9. “Sports is more ethical than business”	3.58	0.91	-.44**	-.40**	-.19	-.11	-.28*	-.56**	.50**	.41**	—		
10. Consideration for shareholders	17.90	9.79	.28*	.10	-.09	-.05	-.02	.14	-.41**	-.01	-.30**	—	
11. Libertarianism	4.38	1.04	.30*	.46**	.50**	.08	.52**	.60**	-.42**	-.43**	-.44**	-.01	—

Note. $n = 59$.

^a The Implicit Association Test measure is continuous. Subsequently, “perceptions of sports” would be the inverse of “perceptions of business” and “immoral” would be the inverse of “moral.”

* $p < .05$. ** $p < .01$.

Table 3
 Linear Regression Results for Study 1

Variable	Consideration given to shareholders				Libertarianism			
	<i>B</i>	<i>SE</i>	η_p^2	95% CI	<i>B</i>	<i>SE</i>	η_p^2	95% CI
Constant	20.86**	5.45	.00	[9.93, 31.79]	2.50**	0.43	.39	[1.63, 3.36]
Sex	-3.32	2.84	.03	[-9.01, 2.38]	0.52*	0.22	.09	[0.07, 0.97]
Caucasian (dummy)	-3.56	4.01	.02	[-11.61, 4.49]	-0.34	0.32	.02	[-0.94, 0.30]
Full-time experience	-0.30	0.67	.00	[-1.65, 1.04]	0.13*	0.05	.11	[0.03, 0.24]
Political affiliation	5.11	3.84	.03	[-2.59, 12.81]	0.84**	0.30	.13	[0.23, 1.44]
Implicit assumption ^a	6.76*	3.22	.08	[0.30, 13.23]	0.52*	0.25	.07	[0.01, 1.03]
<i>R</i> ²	.13				.52			
Adjusted <i>R</i> ²	.05				.47			
<i>F</i>	1.58				11.36**			

Note. *n* = 59. Including age and full-time experience resulted in collinearity problems (variance inflation factor = 3.81), so the variable with the least variance (age) was removed. CI = confidence interval.

^aThe Implicit Association Test measure is continuous. Subsequently, “perceptions of sports” would be the inverse of “perceptions of business” and “immoral” would be the inverse of “moral.”

p* < .05. *p* < .01.

tion was positively associated with a belief about how much consideration managers should give shareholders: The more they implicitly believed in the inherent morality (legitimacy) of the traditional business model, the more consideration they thought shareholders/owners should receive. In addition, the implicit assumption was significantly correlated with libertarianism: The more each participant implicitly believed in the inherent morality of business, the more libertarian were his or her views. These results provided evidence in support of Hypothesis 1.

Discussion

Study 1 provided evidence of the validity of the IAT measure and evidence supporting Hypothesis 1. In Study 2, we sought to gather additional evidence of the validity of the IAT measure and to test Hypothesis 2.

Study 2

Method

Sample. Participants were 126 undergraduate students enrolled in an introductory management course at a West Coast university. They ranged in age from 18 to 50 years (*M* = 21.65, *SD* = 3.65); 75 (59.5%) were women (2 missing). Twelve (9.8%) reported three or more years of work experience, and eight (6.5%) reported none. The sample was 43% Caucasian and 48% Asian.

Procedure. Participants learned about the experiment through an online system that coordinated a research requirement in the course. More than 200 students were enrolled in multiple sections of the course. Given that five other opportunities were available, the participation rate (60%) was quite high. In each session, participants completed the IAT via computer. They then completed a pen-and-paper in-basket exercise. In the exercise, they were asked to imagine themselves as a manager in a fictitious company we created with several tasks to complete (e.g., reassigning sales personnel, ordering office supplies). Tasks relevant to the hypothesis tests were reading a memo from the president and completing an insurance claim.

The contextual cue was manipulated in the corporate memo. In the memo, the company CEO praised the corporate culture. In the competitive condition, he described it as a culture “that emphasizes success—we do what it takes to be competitive!” In the noncompetitive condition, he described it as a culture “that emphasizes values—we will always do what is right!” Manipulations were checked with four items (e.g., “[This company’s] culture emphasizes success”) scored on a 7-point agreement scale (1 = *strongly disagree*, 7 = *strongly agree*). Results indicated that those reading the competitive cues viewed the culture as more competitive and success-oriented than the other condition, *F*(1, 124) = 65.68, *p* = .00, Cohen’s *d* = 1.47. Following this exercise, students completed a survey. All data were provided anonymously.

Measures. Immoral behavior was measured in the insurance claim exercise. Participants were informed that company product had been destroyed en route to the marketplace and that they were responsible for filing the insurance claim. Participants were provided the cost of the product, the advertised price of the product, and the going rate of the product on the black market. They were then instructed to complete the form by indicating the value of the product for reimbursement. Immoral behavior was measured as a dichotomous variable. As values at or below the advertised price were based on legitimate standards defensible in their own right (cost or price), they were considered to be moral and were scored as zero. In contrast, values above the advertised price of the product were based on illegitimate standards (black market) and were therefore deemed to be immoral. Immoral values were coded as 1. To confirm this assessment, we submitted these behaviors to an expert panel consisting of 10 business school professors with an average of 9.50 years experience conducting research on business ethics. As expected, the panel rated submitting a claim based on a value under the fair market value as ethical (1 = *very unethical*, 7 = *very ethical*; *M* = 5.00, *SD* = 1.56) and submitting a claim based on a value over the fair market value as unethical (*M* = 1.30, *SD* = 0.48).

The explicit belief about business was measured with an established five-item scale (Weaver, Treviño, & Cochran, 1999). The items measured the extent to which the participants believed that

five socially oriented concepts (e.g., “seeking the good of society,” “treating people fairly”) should be important to a firm. The scale demonstrated acceptable reliability ($\alpha = .82$).

The implicit assumption was measured with the IAT exercise described in Study 1. In this case, the mean for the implicit assumption was positive (.17), which reflected the expected strength of the traditional business paradigm in a business school setting.

Though the IAT method has demonstrated high levels of predictive validity (Greenwald et al., 2009), we sought additional evidence of the predictive validity of this particular IAT measure. In an approach developed by Reynolds et al. (2006), participants were informed that the company had sold a warehouse and had \$100,000 to distribute at their discretion. They were further informed that coworkers had suggested three different outlets for the money: a stockholder dividend, an employee-managed scholarship program, and a community youth development program. Preference for stockholders over nonowner stakeholders was measured as the amount of money (ranging from \$0 to \$100,000) distributed to the stockholders ($M = \$42,289$, $SD = \$38,374$). An implicit assumption that the traditional, economics-minded capitalistic model is moral should be manifest in a preference for stockholders at the expense of stakeholders. Partial correlational analysis demonstrated that after controlling for the effects of the manipulation and the explicit belief, an implicit assumption that business is moral was significantly associated with a preference for stockholders ($r = .20$, $p = .03$). This result provided additional evidence of the predictive validity of this IAT measure.

Results

Means, standard deviations, and a correlation matrix of the variables are presented in Table 4. Results of binary logistic regression are presented in Table 5. As Model 1 reveals, none of the main effects were significant. This result notwithstanding, the model was hierarchically well formulated, which allowed for a test of interaction effects (Jaccard, 2001). Hypothesis 2 held that the implicit assumption would interact with the contextual cue to shape immoral behavior such that a belief that business is moral and a competitive cue would lead to immoral behavior. Results of Model 2 indicate that the interaction between the implicit assumption and the competitive cue (condition) significantly influenced the decision to seek reimbursement for more than the advertised price. The results indicate (see Figure 1) that those who believed that business is inherently moral and received a competitive cue

were 33 times more likely to file a claim based on an illegitimate valuation. These results supported Hypothesis 2.

Discussion

Study 2 satisfied two objectives. First, the distribution exercise provided additional evidence of the predictive validity of the IAT. Second, the insurance claim exercise provided evidence that the implicit belief the business is moral can interact with contextual cues to shape moral behavior, as Hypothesis 2 predicts. We note that in this exercise neither the explicit measure nor the competitive cue was a significant predictor of moral behavior. In hindsight, we speculate that these findings are the result of using a dichotomous, less statistically sensitive, dependent variable. Indeed, those findings make the interaction effect all the more noteworthy.

General Discussion

The research contributes to the literature in at least three ways. First, the research demonstrates an association between a concept (business) and its normative valence, thus advancing the notion of an implicit assumption and opening a door to other similar measures. Given that a concept can have a moral association, as Reynolds' (2006) model of moral decision making suggests, the empirical possibilities both for concepts with obvious moral dimensions (e.g., bribery) and for those with less obvious moral dimensions (e.g., globalization) would seem to be limitless.

Second, this research demonstrates a relationship between an implicit assumption about the moral nature of business and moral behaviors. In particular, these findings provide evidence that implicit assumptions about morality help explain variance in moral behavior above and beyond that explained by explicit beliefs. Thus, we provide empirical evidence of the importance of both the deliberate and the intuitive aspects of decision making (Haidt, 2001; Reynolds, 2006; Schneider & Shiffrin, 1977).

Finally, this research makes a contribution by developing and empirically assessing the characterization of employees as reflexive interactionists. Though the field has acknowledged the roles of deliberate reasoning, automatic processes, and context in shaping moral behavior (Banaji et al., 2003; Caruso, Epley, & Bazerman, 2006; Chugh, 2004; Chugh et al., 2005; Wade-Benzoni, Tenbrunsel, & Bazerman, 1996), no studies have empirically examined how individual behavior might be a product of the interaction between automatic cognitive processes and environmental factors. Accordingly, this research makes a contribution by demonstrating

Table 4
Means, Standard Deviations, and Correlation Matrix of Variables in Study 2

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
1. Claim (dichotomous)	0.17	0.38	—					
2. Age	21.65	3.58	-.09	—				
3. Gender	0.39	0.48	-.17	-.03	—			
4. Contextual cue (condition)	0.58	0.50	-.05	.07	.04	—		
5. Explicit belief	5.82	0.86	.07	-.11	-.06	-.07	—	
6. Implicit assumption	0.17	0.42	.10	-.05	-.02	-.15	-.00	—

Note. $n = 126$.

Table 5
Binary Logistic Regression Results for the Hierarchically Well-Formulated Model in Study 2

Variable	Model 1			Model 2		
	<i>B</i>	<i>SE</i>	Exp(<i>B</i>)	<i>B</i>	<i>SE</i>	Exp(<i>B</i>)
Constant	-2.95	1.84	0.05	-8.04*	4.11	0.00
Contextual cue (condition)	-0.12	0.49	0.89	7.40	4.75	1629.10
Explicit belief	0.22	0.30	1.24	1.12	0.66	3.06
Implicit assumption	0.68	0.59	1.97	-1.95	5.77	0.14
Contextual Cue × Explicit Belief				-1.40	0.79	0.25
Contextual Cue × Implicit Assumption				3.50**	1.35	33.11
Explicit Belief × Implicit Assumption				0.14	0.91	1.14
-2 log likelihood						99.65

Note. $n = 126$. Unstandardized regression coefficients are shown. Dependent variable equals claim amount.
* $p < .05$. ** $p < .01$.

that implicit assumptions about the moral nature of business interact with cues from the organization environment salient to the implicit association and thereby shape moral behavior.

Limitations

This research is not without limitations. For example, the IAT method has been subject to many criticisms (e.g., Arkes & Tetlock, 2004). Though the most common objections have been addressed at length (Greenwald & Nosek, 2001; Greenwald, Rudman, Nosek, & Zayas, 2006; Greenwald et al., 2009), we acknowledge continuing concerns with the method. With regard to possible objections to the IAT we developed, we suggest that the variance found between individuals, the use of a prevalent control concept (i.e., sports), and evidence of construct and predictive validity indicate that the measure captured a powerful and important implicit association that, though likely shaped by a predominant cultural paradigm, still varies greatly across individuals. Future research can assess our claim.

Additionally, though our research measured this implicit association, we did not consider its origins. Reynolds' (2006) discussion of ethical prototypes suggests that such assumptions are formed from years of experience but can nevertheless be altered through new experiences and personal reflection. Thus, we expect such factors as educational and functional backgrounds (Hambrick

& Mason, 1984), social networks (Brass, Butterfield, & Skaggs, 1998), and ethics training (Frisque & Kolb, 2008) to be relevant. Future research can explore these issues in detail.

We also recognize limitations specific to Study 2. First, we have argued that salience is the key characteristic of contextual cues, but the cue we utilized was explicit and had a normative tone. Future research could explore our hypothesis with a more subtle and more agnostic contextual cue to verify our core argument. Second, we used a dichotomous dependent variable. A scalar measure of moral behavior would provide more generalizable results. Third, we note that whereas Study 2 revealed a relationship between an implicit belief, a contextual cue, and moral behavior, it did not investigate the process by which the cue turned or translated that implicit belief into a behavior. Future research could explore the mechanics of these automatic processes while controlling for well-documented moral traits (e.g., relativism, moral attentiveness) and thereby provide a more thorough treatment of this phenomenon.

Theoretical and Practical Implications

Our research has important theoretical and practical implications. For example, our findings spark questions about the tension between organizational responsibility and individual moral agency (Ashforth & Anand, 2003; Bandura, 1999; Sykes & Matza, 1957). This research suggests that implicit assumptions can be activated by the social context to influence immoral behavior independent of cognitive and deliberate attempts to justify one's actions. In other words, perhaps there is less moral agency in moral decisions than previously considered, and perhaps organizations bear more responsibility for the actions of their members than is currently understood. Our research suggests that organizations might take a proactive approach to influencing employees' perceptions of business as a complex activity filled with moral obstacles. Rather than displaying confidence that business is a moral venture, leaders instead might warn employees against possible immoral behavior within the business context. This might be accomplished in new employee socialization (Ashforth & Anand, 2003), as well as in employee training (Frisque & Kolb, 2008). To the extent that organizations are aware of the contextual cues they propagate, perhaps there is power to improve moral behavior within their boundaries.

Last, we acknowledge that for some these findings might provide an excuse or a justification for immoral actions. For example,

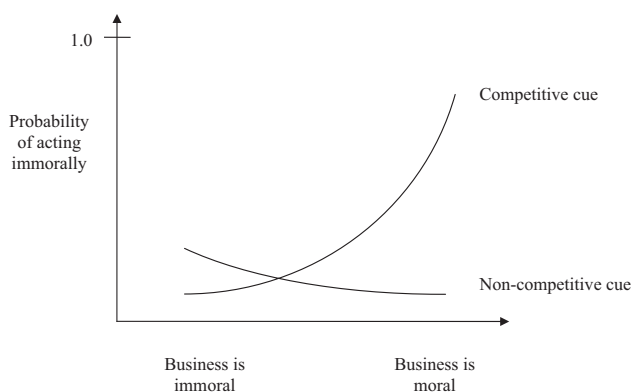


Figure 1. The interaction of implicit assumption and contextual cue on immoral behavior.

recent theoretical work suggests that certain occupations are regularly associated with implicit beliefs that can “morally seduce” employees to do wrong (Moore, Tetlock, Tanlu, & Bazerman, 2006, p. 3). Whereas our research may help to explain immoral behavior, it is not an excuse or a justification for immoral behavior. We urge researchers to explore these issues to find strategies to prevent such behaviors.

In closing, we believe that our research represents a promising new approach to understanding individual moral behavior in organizations. In our opinion, the potential contributions of such an approach are not just empirical but also theoretical and practical. For these reasons, we are hopeful that more research along these lines will dramatically increase our knowledge of moral behavior in organizations.

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