

HOW MAKING THE SAME DECISION IN A “PROPER WAY” CREATES VALUE

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We hypothesized that perceiving oneself as choosing an object in a proper way, by strengthening engagement in the ongoing decision process, can intensify attraction to the chosen object. Participants in all four studies chose between a coffee mug and a nonexpensive pen. The analyses were restricted to those participants who made the *same* choice—overwhelmingly, the coffee mug. Participants’ experience of using proper means to make their choice was manipulated by telling participants either to justify their decision (Studies 1a & b) or to make their decision “in the right way” (Studies 2a & b). The other participants used the same means to make their choice (i.e., listing the positive and negative consequences of choosing the mug and of choosing the pen) but were given instructions to experience them as purely instrumental means. In all four studies, the perceived monetary value of the same chosen mug was substantially greater in the “proper way” condition than the “instrumental way” condition. Additional findings supported the proposed mechanism for this effect rather than alternative mechanisms: the effect was independent of participants’ mood, as well as their perception of the effectiveness or efficiency of the decision process; it occurred only when the justification was part of the decision-making process itself; it was greater for participants with a stronger general belief in the importance of making decisions in a proper way; making decisions in a proper way increased the perceived value of the positive, nonchosen pen as well as the chosen mug; and the perceived value of the chosen mug depended on the number of its perceived positive attributes in the “instrumental” condition but not in the “proper way” condition.

Where does value come from in decision making? One classic answer is that value comes from the outcomes or consequences of making a particular choice. From this classic perspective, the process of making a decision matters to the extent that it is instrumental to choosing the alternative with the best combination of positive

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and negative consequences and to the extent that it is relatively easy to carry out. In other words, the process matters to the extent that it produces high outcome benefits (effectiveness) at low process costs (efficiency). It is well-known, however, that the value of decision processes or means do not derive solely from their instrumentality (i.e., effectiveness and efficiency). A variety of factors can influence the value of a decision process to a decision maker; i.e., "choice-process satisfaction" (e.g., Houston, Sherman, & Baker, 1991; Zhang & Fitzsimons, 1999).

A major process factor is captured in cultural maxims such as, "It is not enough to do good, one must do it the right way," "The end does not justify the means," "What counts is not whether you win or lose, but how you play the game," and "Never good through evil." These maxims distinguish between the value of means that derives from their instrumentality and the value that derives from their being the right or proper way to do something. Psychologists and other social scientists have recognized for a long time that the use of proper means to make decisions, or to pursue goals more generally, has value to people (e.g., Merton, 1957; Rokeach, 1973). Of special relevance to the present paper is the value derived from the use of proper means that has been described in the literatures on justification or accountability (see, for example, Pennington & Hastie, 1988; Tetlock, 1991; Tversky & Shafir, 1992) and on procedural justice (see, for example, Thibaut & Walker, 1975; Tyler & Blader, 2000; Tyler & Lind, 1992). March (1994) provides a compelling example of the value from the use of proper means when he describes the value that accrues from a person using established decision rules (i.e., rules about how a decision should be made) that are appropriate to his or her situated identity.

It is well known, then, that people derive value not only from outcome-related factors in a decision but also from noninstrumental factors in how the decision was made—satisfaction with the choice process. Typically, this added value comes from the decision process satisfying a second goal of the decision maker, such as the goal of behaving in an ethical or just manner, that is separate from the goal that initiated the focal goal pursuit. The additional value derived from attaining the second "ethical" goal is experienced independently of whatever value derives from the object of the focal goal pursuit. What has not been investigated (to our knowledge) is whether decision makers' perception while making a choice that they are making it in a right or proper way can affect the *post-choice attractiveness of the chosen object itself*. That is, can making decisions in a proper way add value to the object of the focal goal pursuit? There is evidence, in the reactance (Brehm, 1966; Wicklund, 1974) and dissonance (e.g., Brehm & Cohen, 1962; Festinger, 1957; Wicklund & Brehm, 1976) literatures for example, that the way in which a choice is made can influence the value of the chosen object. However, what has not been examined is the impact on a chosen object's value from perceiving during the decision process that the choice is being made in a proper way. The purpose of our studies was to examine this issue.

We need to begin by clarifying what the term "proper" refers to in the current paper with respect to making a decision in a "proper" way. A strong form of "proper" is exemplified in the following statement by Merton (1957): "Every social group invariably couples its cultural objectives with regulations, rooted in the mores or institutions, of allowable procedures for moving toward these objectives" (p. 133). The cultural objectives are the "things worth striving for"—what has outcome value in the culture. The "allowable procedures" concern shared beliefs about the acceptable ways to strive for the worthwhile things—what has process value in

the general culture (see also Rokeach, 1979; Schwartz, 1992). A weaker form of "proper" is exemplified in March's (1994) conceptualization mentioned earlier of a person using established decision rules that are appropriate to his or her situated identity.

What we mean by "proper" in our paper is closer to March's (1994) weaker form of "proper." There is no implication in our conception of "proper way" that the decision rules being followed have to be culturally shared beliefs about allowable procedures (i.e., the "strong" form of "proper"). Rather, we are referring to individuals' *perception* that the way they are making a decision is not solely instrumental but is also appropriate given the current circumstances, such as appropriate for the kind of decision being made or appropriate for the decision maker's current role or identity. Thus, the same decision process (considering the positive and negative consequences of choosing one object over another) could be framed as being purely instrumental or as being the proper or appropriate way to make the decision. What is important is whether the way in which a decision is being made is perceived as proper, regardless of whether its being "proper" derives from a narrowly defined sense of appropriateness given the current circumstances or from a broader sense of culturally shared beliefs about what is proper.

PROPER WAY TO MAKE DECISION AND ENGAGEMENT

Let us turn now to the specific question of how perceiving that one is making one's choice in a proper way affects the subsequent value of the chosen object. Our starting assumption is that the process of making decisions, like any goal pursuit process, generates experiences of different kinds (Schwarz & Clore, 1996). Among these experiences is strength of engagement in the decision-making activity itself. In a recent review (Higgins, 2006), evidence was presented from a wide range of studies showing that factors that increase strength of engagement in an activity intensify the value response to the target of the activity—intensifying attraction toward a positive target and intensifying repulsion away from a negative target. In brief, we propose that perceiving oneself as making a decision in a proper way increases the strength of engagement in the choice activity itself, and stronger engagement intensifies the attraction toward the (positive) chosen object. Let us now consider this proposal in more detail.

The state of being engaged is to be involved, occupied, and interested in something. Strong engagement is to concentrate on some target or activity, to be absorbed or engrossed with it. Historically, strength of engagement relates to the notion that people can be interested in something independent of its hedonic valence, and that this has value implications (e.g., Berlyne, 1973; Mandler, 1984; Perry, 1926; Ziff, 1960). From our perspective, and in contrast to such earlier proposals, the critical property of engagement for value creation is the strength of the engagement *per se* rather than whether the engagement activity itself happens to be pleasant or unpleasant (see Higgins, 2006). It is possible, for example, to be engaged strongly in decision making despite the process itself being unpleasant as an activity. It is not the hedonic experience of the decision process that is critical but the strength of engagement in the process.

We propose that making a decision in a proper way increases the strength of involvement or engagement in the decision. Tyler and Blader (2000, 2003) have ar-

gued that people are more psychologically engaged in groups when those groups are run by fair procedures. They find that fair procedures produce more active group helping behavior. Similarly, we propose that when individuals believe they are making their decision in a proper way, they engage in the decision-making activity more strongly.

How does engagement strength contribute to how much an object is valued? This question is addressed in detail in Higgins (2006). According to Lewin (1951), value is a *force* that has direction and strength. Higgins (2006) follows Lewin's (1951) lead but postulates an *experience* of the force that has direction and strength. The directional component of the value force experience (i.e., attraction versus repulsion) is critical to the psychology of value. This is why the hedonic experiences of pleasure or pain are so important (see Kahneman, Diener, & Schwarz, 1999). But value experiences have more than direction. They also vary in strength or intensity so that the experience of attraction can be relatively weak or strong (low or high positive value), and the experience of repulsion can be relatively weak or strong (low or high negative value). The contribution of strength of engagement to the value force experience is not through an influence on direction but through its influence on the intensity of the motivational force to make something happen (experienced as the intensity of the force of attraction) or make something not happen (experienced as the intensity of the force of repulsion).

The most direct evidence for the role of engagement strength in value creation is provided by studies on regulatory fit. Regulatory fit occurs when a decision is made in a way that sustains the current goal orientation of the decision maker (Higgins, 2000). For example, people can make a decision with either a promotion orientation toward advancement and accomplishment or a prevention orientation toward security and responsibilities (for a fuller discussion of regulatory focus, see Higgins, 1997). Independent of these orientations, people can use either an eager strategy or a vigilant strategy as the way to make the decision. There is substantial evidence that using an eager strategy sustains, i.e., fits, a promotion orientation whereas using a vigilant strategy fits a prevention orientation (e.g., Crowe & Higgins, 1997).

There are several studies showing that when people pursue a goal in a manner that fits their current orientation, they engage more strongly in the goal pursuit activity (e.g., Bianco, Higgins, & Klem, 2003; Forster, Higgins, & Idson, 1998; Shah, Higgins, & Friedman, 1998; Higgins, 2000). For instance, regulatory fit has been shown to lead to greater engagement as measured by greater arm pressure (Forster et al., 1998), greater persistence on a task, and greater attention to the central merits of the target activity (Bianco et al., 2003). More importantly for the present studies, this literature has shown that the monetary value of a chosen object increases when the choice is made under conditions of regulatory fit (e.g., Avnet & Higgins, 2003; Higgins, Idson, Freitas, Spiegel, & Molden, 2003).

To test directly whether regulatory fit contributes to the value of a choice by increasing engagement strength and strength of motivational force, Idson, Liberman, and Higgins (2004) modified a well-known example from Thaler (1980). All participants were instructed to imagine that they were in a bookstore buying a book for a class. The orientation toward the buying decision was framed in two different ways—a promotion “gain/nongain” framing and a prevention “non-loss/loss” framing—while keeping the desirable choice outcome (paying \$60 for the book) and the undesirable choice outcome (paying \$65 for the book) the same

in both framing conditions. In addition to measuring how good or bad participants felt about the imagined decision outcome, separate measures were taken of pleasure/pain intensity (e.g., participants were asked how pleasant the positive outcome would be or how painful the negative outcome would be) and strength of motivational force (e.g., participants were asked how motivated they would be to make the positive outcome happen or to make the negative outcome not happen). Idson et al. (2004) found that pleasure/pain intensity and strength of motivational force each made significant *independent* contributions to the perceived value of the imagined outcome (i.e., its goodness/badness).

In sum, previous research on regulatory fit has demonstrated how goal pursuit conditions that increase strength of engagement in a goal pursuit activity can intensify attraction toward a positive value target. Because the term “fit” also refers to appropriateness, it is important to highlight the difference between value creation from pursuing goals with regulatory fit and value creation from pursuing goals in a proper way. The appropriateness in pursuing goals with regulatory fit refers to whether the manner of goal pursuit, such as being eager or vigilant, sustains (fit) or disrupts (nonfit) the motivational orientation of the actor, such as having a promotion or prevention focus. The appropriateness in pursuing goals in a proper way refers to whether the process of goal pursuit is perceived by the actor as the right or proper way to pursue the goal given the current circumstances. The purpose of the present studies was to examine for the first time whether this second kind of appropriateness is another condition that can strengthen engagement in a choice activity and thereby intensify attraction toward the chosen object.

OVERVIEW OF PRESENT STUDIES

In our studies, everyone makes the same choice between two alternatives, a Columbia coffee mug and a nonexpensive pen, by using the same instrumental means—considering the positive and negative consequences of choosing the mug and the positive and negative consequences of choosing the pen (see Higgins et al., 2003). This is the classic instrumental method for making a choice as described, for example, in reasoned-action models of decision making, in which the positive outcomes or consequences of a choice are reasons for making that choice and the negative consequences are reasons for not making that choice (see Ajzen, 1996). The coffee mug and pen were carefully selected to ensure that almost all of our participants would choose the mug over the pen. Thus, our participants not only used the same instrumental means to make their decision, but they also made the same choice. We wanted the instrumental means and the actual choice to be the same in order to control for the outcome value of the choice itself as well as the perceived effectiveness and efficiency of the choice process.

What varied across conditions was that some participants not only used the instrumental means to make their decision but also experienced these means as being the right or justifiable (i.e., proper) way to make the decision. Specifically, participants’ experience of using proper means to make their choice was manipulated by telling participants either to justify their decision (Studies 1a & b) or to make their decision “in the right way” (Studies 2a & b). The participants in the contrast conditions used the same means to make their choice but were given instructions that framed them as purely instrumental means, either by telling them to think of

reasons for their decision (Studies 1a & b) or to make “the best choice” (Studies 2a & b). Thus, our question was whether perceiving that one is making one’s choice in the proper way (holding instrumental means constant) can affect the subsequent value of the chosen object.

Across the four studies, we also tested additional assumptions and implications of our proposal that making a choice in the proper way strengthens engagement that intensifies the attractiveness of the chosen object. (1) To rule out the possibility that making a choice in the proper way impacts value by affecting mood or perceptions of process effectiveness or efficiency, mood and perceived effectiveness and efficiency were measured and statistically controlled for (Studies 2a and b). (2) Our account necessitates that individuals experience the way they choose as proper *during* the decision process and *prior to* making a choice because only then can it increase engagement in the process itself, with stronger engagement intensifying the mug’s attractiveness. In Studies 1a and 1b, we examined what happens when individuals perceive the process as justified or proper *after* vs. *before* the choice process has already been made. (3) If the mechanism underlying the increased attraction toward the chosen object is, indeed, increased strength of engagement from making the choice in a proper way, then this effect should be stronger for those who have stronger beliefs about the importance of pursuing goals in a proper way because personal relevance increases involvement (Eagly & Chaiken, 1993). This was examined in Study 2a. (4) Although the mug was designed to be the dominant choice, both the mug and the pen are positive objects. If choosing in a proper way has its value effect through increasing strength of engagement, as hypothesized, then *both* the mug and the pen should increase in value in the “proper way” condition. This was tested in Study 2b. (5) In Studies 1a, 1b, and 2a, increased engagement from making the choice in the proper way is inferred from the predicted increased attraction toward the chosen object. There are no direct measures of engagement. In Study 2b, we included a more direct measure of whether there is increased engagement in the “proper way” condition by assessing participants’ attention towards the central merits (positive attributes) of the dominant mug (see Bianco et al., 2003; Cesario & Higgins, 2007). (6) By assessing participants’ attention towards the positive attributes of the chosen mug, it was also possible in Study 2b to test the proposal that participants’ attraction toward the mug derives from a mechanism in the “proper way” condition that is beyond just the hedonic properties of the mug. Specifically, whereas in the instrumental condition (“best choice”) the value assigned to the mug *should* depend on the mug’s number of positive attributes, this should *not* be the case in the “proper way” condition.

STUDY 1A

METHOD

Participants

The participants were 78 Columbia undergraduates (32 male, 43 female) who were paid \$6.00 for their participation in a battery study. There were no gender differ-

ences in any of the analyses reported. Five participants were dropped from the analysis either because they did not follow instructions (3 participants) or because they did not choose the Columbia coffee mug (2 participants).

Procedure

For the first 30 minutes of the experiment, the participants completed a number of tasks unrelated to the present study. The participants were then told that, in appreciation of their taking part in the study, they would receive a gift, over and above the payment they had been promised. They were told that they could choose between a Columbia coffee mug and an inexpensive disposable pen that they were shown. Participants were randomly assigned into one of four conditions—Justification Before, Justification After, Reasons Before, and Reasons After—with the following instructions:

(a) Justification Before—Before making their choice, the participants were asked, “Why would you choose one over the other? In other words, how would you justify whatever choice you make? Write down your answer.”

(b) Justification After—After making their choice, the participants were asked, “Why did you choose one over the other? In other words, how do you justify your choice? Write down your answer.”

(c) Reasons Before—Before making their choice, the participants were asked, “Why would you choose one over the other? In other words, what would be the reasons for your choice? Write down your answer.”

(d) Reasons After—After making their choice, the participants were asked, “Why did you choose one over the other? In other words, what are the reasons for your choice? Write down your answer.”

The participants wrote down either their justification or their reasons for their choice. The manipulation, though subtle, was designed to create conditions that varied in what the deliberation process was “about” (Higgins, 1998). The Reasons manipulation directed participants’ attention to *the facts underlying the choice*—i.e., reasons are “about” the attributes of the mug or the pen. In contrast, the Justifications manipulation directed participants’ attention to *the decision process underlying the choice*—i.e., as defined (Oxford English Dictionary, 1971) justifications are “about” showing something to be right and proper.

Almost all of the participants chose the mug. Because it was essential for our studies that all participants make the same decision, those few participants who did not choose the mug were debriefed and dismissed from each study. These participants were not included in the analysis. For those participants who chose the mug, they were then shown a more expensive reference pen (not the disposable pen that was their alternative to the mug) and were asked, “If the price of this pen is \$3, what do you think is the price of the coffee mug?” After assigning a price for the mug, the participants were debriefed and dismissed.

RESULTS AND DISCUSSION

We predicted that the experience of making a decision in a justified manner (i.e., the Justification Before condition) would lead to the mug being assigned a higher

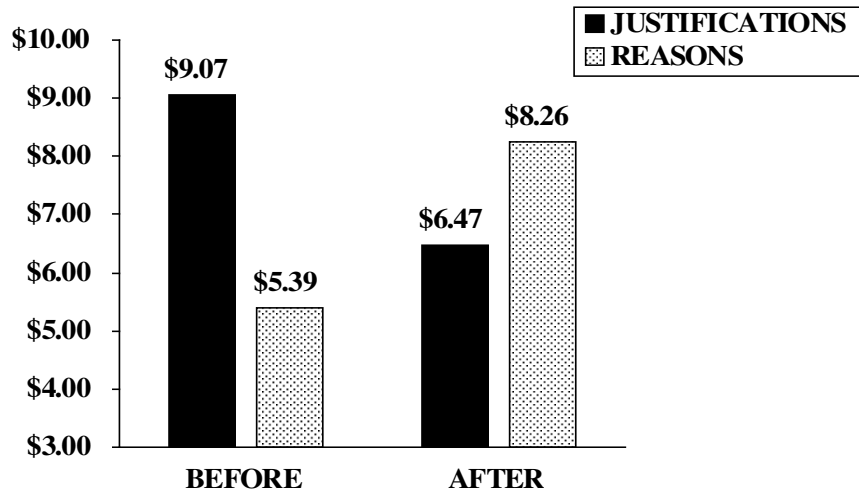


FIGURE 1. Timing of Statements.

Mean price assigned to the chosen mug by type and timing of statements.

price than when justification occurred after making the decision and when only instrumental reasons were given for one's choice. The results supported this prediction. A Type of Statement (Justifications; Reasons) X Timing of Statement (Before; After) analysis of variance revealed no significant main effects and a significant two-way interaction, $F(1, 66) = 5.47, p < .03$. As shown in Figure 1, the interaction pattern was in the predicted direction. As predicted, a planned contrast ($p < .10$) revealed that the participants assigned the mug a higher price in the Justification Before condition ($M = \$9.07, SD = 6.91$) than in the Justification After condition ($M = \$6.47, SD = 3.21$). Of particular importance, the participants assigned the mug a much higher price ($p < .05$) in the Justification Before condition ($M = \$9.07, SD = 6.91$) than in the Reasons Before condition ($M = \$5.39, SD = 2.61$)—almost 70% higher. This is the predicted effect of using proper means when making the decision that adds an engagement experience beyond solely instrumental means. We also predicted that justification would create value when it was experienced while the decision was made but not when it occurred after the decision had already been made. As shown in Figure 1, this prediction was also supported in that the perceived value of the chosen mug was not greater in the Justification After condition ($M = \$6.47$) than the Reasons After condition ($M = \$8.26, SD = 7.31$). Indeed, the effect was nonsignificantly in the opposite direction. It should also be noted that within the Reasons conditions, the participants assigned the mug a significantly higher price ($p < .05$) when they gave their reasons after ($M = \$8.26$) than before ($M = \5.39) they made their decision. This was probably because participants were more balanced in their consideration of the trade-offs of the two options before than after they had made their decision.

If the perception of choosing in a proper way created value that transferred to the chosen object because individuals were simply more satisfied with the process, i.e., because it had been justified, then justification should increase the mug's attraction regardless of whether it occurred *before* or *after* the choice. The pattern of findings does not support this alternative explanation. Instead, only when justi-

fication occurred *prior* to the choice did the mug's value increase, supporting the proposal that choosing in a proper way impacts value by increasing strength of engagement in the decision-making activity.

STUDY 1B

Assigning a monetary price to an object one possesses, as each participant did in Study 1a, is a standard way to measure its value to that person. One might wonder, however, if the value would seem different if one had to spend one's own money to possess the object rather than assigning a price after receiving the object as a gift. In other words, what would happen if each participant first chose which object they preferred, but then had to decide how much they were willing to spend of their own money to possess the object? The procedure used in Study 1b was basically the same as that in Study 1a, but instead of asking participants to assign a price to the mug, they were given the opportunity to spend their own money to purchase it. The money they offered to buy the mug was the dependent measure.

METHOD

Participants

Sixty-eight Columbia University students (30 men, 38 women) were paid \$5 for their participation in this experiment. All participants indicated that English was their native language. There were no significant effects of gender. Seven participants were removed from the analyses because they did not choose the mug.

Procedure

The basic procedure was the same as in Study 1a except that the participants were not given the choice of the mug or pen as a gift. Instead, they were asked to choose between the mug and the pen "as part of a study conducted by the Marketing Department." As in Study 1a, the participants were randomly assigned to one of four experimental conditions (i.e., Justification Before; Justification After; Reasons Before; Reasons After). Also, as in Study 1a, the participants who chose the pen were paid, thanked for their participation, and dismissed.

For those participants who chose the mug, they were given the opportunity to own it. They were shown an envelope and told that it contained the price of the mug. The participants did *not* know what the hidden price was in the envelope. They were then given \$5, their payment for participating in the experiment. The participants could use this money, plus any other money they had with them, to buy the mug if they wished. If the price they offered was less than the amount in the envelope, they would not get the mug. However, if the price they offered was more than or equal to the amount in the envelope, they would get the mug *for the price they offered*. The dependent measure was the price participants offered to buy the mug. (The mug was actually given free to the participants.)

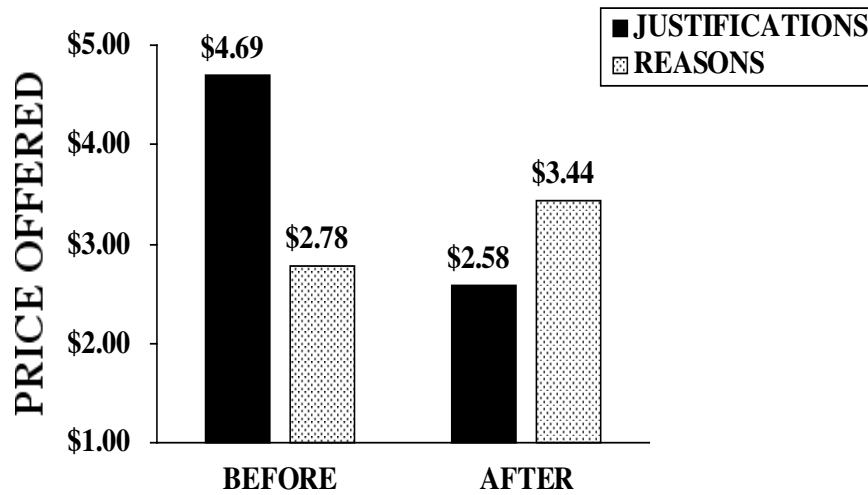


FIGURE 2. Timing of Statements.

Mean price offered to buy the chosen mug by type and timing of statements.

RESULTS AND DISCUSSION

As in Study 1a, we predicted that the experience of making a decision in a justified manner (i.e., the Justification Before condition) would lead to the mug being assigned a higher price than when justification occurred after making the decision and when just instrumental reasons were given for one's choice. The results supported this prediction. A Type of Statement (Justifications; Reasons) X Timing Of Statement (Before; After) analysis of variance revealed no significant main effects and a significant two-way interaction, $F(1,57) = 3.88, p = .05$.

As shown in Figure 2, the interaction pattern was in the predicted direction. As predicted, a planned contrast ($p < .05$) revealed that participants offered to buy the mug at a higher price in the Justification Before condition ($M = \$4.69, SD = 3.01$) compared to the Justification After condition ($M = \$2.58, SD = 1.76$). Of particular importance, the participants offered to buy the mug at a much higher price ($p < .05$) in the Justification Before condition ($M = \$4.69$) than in the Reasons Before condition ($M = \$2.78, SD = 3.17$)—once again, almost 70% higher. This is the predicted effect of using proper means when making the decision that adds an experience beyond just instrumental means. We also predicted that justification would create value when it was experienced while the decision was made but not when it occurred after the decision had already been made. As shown in Figure 2, this prediction was also supported in that the perceived value of the chosen mug was not greater in the Justification After condition ($M = \$2.58$) than the Reasons After condition ($M = \$3.44, SD = 2.50$); indeed, the effect was nonsignificantly in the opposite direction.

GENERAL DISCUSSION OF STUDIES 1A & B

The results of Studies 1a & b clearly supported our predictions. Both studies found that justifying whatever choice one made *before* making the decision, i.e., perceiving oneself *during* the decision-making process as acting in a proper way, led to the mug being assigned a higher price than when justification occurred after making the decision or when only reasons were given for one's choice (i.e., using just instrumental means). Study 1b showed that the effect occurred even when the participants offered their own money to buy the chosen mug.

There are advantages of the "explicit justification" method for manipulating participants' perception of making their decision in a proper way. With this method, the participants explicitly engage in justification while making their decision and carry out the justification in whatever way that they feel is the right way for them. This approach highlights that what is critical is the *perception* that the approach is proper. The complementary disadvantage is that there is no direct experimental control over the specific instrumental means used by the participants. Therefore, it would be useful to replicate these studies using a different method that experimentally ensures that the same instrumental means are used to make the decision while also manipulating whether participants do or do not also experience themselves as making their decision in the proper way. This was a major purpose of Studies 2a & b. This was accomplished by having all participants write down the positive and negative consequences of choosing the mug and the positive and negative consequences of choosing the pen. In this way, all participants made their decision using the same instrumental means. Half the participants received instructions framed to make them experience what they were doing as just using instrumental means; i.e., "The BEST CHOICE" is the choice with the better consequences. The other half of the participants received instructions framed to make them experience what they were doing as the proper way to make their decision; i.e., "Making Your Decision in the RIGHT WAY!"

There were four additional purposes of Studies 2a & b. First, as discussed earlier, measures of hedonic mood and perceived effectiveness and efficiency were taken in order to statistically control for their effects. Second, Study 2a asked participants how much they agreed with cultural maxims concerning the importance of pursuing goals in a proper way, maxims such as "The end does not justify the means" and "What counts is not whether you win or lose, but how you play the game." The more strongly individuals agree with such maxims, the more strongly they should engage in the decision process when they are behaving in the proper way, and the stronger the predicted effect should be. Third, Study 2b asked participants to assign a price to the pen as well as to the mug to test whether stronger engagement from choosing in a proper way would intensify the attractiveness of *both* the positive chosen mug *and* the positive nonchosen pen. Lastly, in Study 2b we examined a more direct measure of engagement in the decision-making process by coding participants' responses for attention to the central merits of the focal object (the positive attributes of the mug). If the Right Way condition affects value by increasing engagement, we would expect to see evidence of greater attention to the central merits of the dominant mug in the Right Way condition than the Best Choice condition.

STUDY 2A

METHOD

Participants

Forty-five Columbia University students (19 men and 26 female) were paid \$8 for their participation in the experiment. There were no significant effects of gender. All participants indicated that English was their native language. One participant was excluded from the analysis for not choosing the mug.

Materials

Prior to the decision task, and ostensibly as part of a different study, participants were given a questionnaire designed to measure differences in how strongly individuals generally believe in the importance of pursuing goals in a proper way. This questionnaire was administered within a battery of four other unrelated questionnaires that altogether took 40 minutes to complete. This questionnaire asked participants to indicate on a 5-point scale (from 0 “do not agree at all” to 4 “agree very strongly”) their agreement with 10 different sayings or maxims, only three of which related to the value of pursuing goals in a proper way and were interspersed among the seven other sayings that functioned as distractors (e.g., “If you don’t know where you’re going, you might not get there”). A principle components analysis with no rotation was performed on these three items. The analysis revealed only a single factor, which we identify as strength of belief in the importance of pursuing goals in a proper way. The loadings on this factor for the relevant items were as follows: “The end does not justify the means (0.701); What counts is not whether you win or lose, but how you play the game (0.794); To do it this way or that, it does not matter— results are all that count (reverse coded, -0.659). We computed an index of “strength of belief in the importance of pursuing goals in a proper way” by combining these three items, with higher scores indicating a stronger general belief in the importance of pursuing goals in a proper way.

Procedure

The study used an “unrelated studies” paradigm. Ostensibly to prepare materials for another study to be conducted later, for the first 40 minutes of the session participants completed a battery of questionnaires, all of which were irrelevant except for the embedded questionnaire measuring strength of belief in the importance of pursuing goals in a proper way. Within this questionnaire, only three of the 10 items were relevant. For all participants, there was well over 25 minutes between their responses to the three target items and the beginning of the decision task—time that was filled by answering many other questionnaire items. After completing the battery of questionnaires, the participants were presented with the choice between a Columbia University mug and an inexpensive disposable pen. Participants were randomly assigned to two different conditions that varied in what was emphasized about the decision—either an emphasis on making their decision in

the right way (proper decision making) or an emphasis on making the best choice (instrumental decision making).

The "Right Way" emphasis condition began with the title, "Making Your Decision in the RIGHT WAY!," and then continued as follows:

You need to make your decision in the right way. The right way to make a decision is to think about which choice has the better consequences. Think of the positive and negative consequences of choosing the mug. Think of the positive and negative consequences of choosing the pen. Please write down your thoughts on the lines below.

The "Best Choice" emphasis condition began with the title, "The BEST CHOICE!," and then continued as follows:

The best choice is the choice with the better consequences. Think of the positive and negative consequences of owning the mug. Think of the positive and negative consequences of owning the pen. Please write down your thoughts on the lines below.

The experimental manipulation of decision emphasis was always given to participants *before* they actually made their choice. Participants were then paid the \$8 they were promised at the onset of the experiment. Exactly as in Study 1b, they were then given the opportunity to buy the mug. The primary dependent measure was how much money they offered to buy the mug. (The mug was actually given free to the participants.)

After the monetary measure was collected, the participants were asked to complete a measure of their current mood (how happy, sad, dejected, relaxed, cheerful, tense, content do you feel right now), as well as measures of their perception of the efficiency and the effectiveness of their decision-making process. Each scale was a 9-point scale (from 0 "not at all" to 8 "extremely"). These measures were included to control for any effects of positive mood (the negative mood scores were reversed and combined with the positive mood scores), perceived efficiency (ease), or perceived effectiveness (instrumentality) on the money offered to buy the chosen mug. At the end of the study, the participants were debriefed and thanked for their participation. During debriefing, the participants were asked whether anything about filling out the battery of questionnaires might have influenced what they did in the decision task. No participant made any comment suggesting that these two phases were related in any way.

RESULTS AND DISCUSSION

Our prediction was that despite no difference in the instrumental means employed, the participants in the Right Way condition, but not in the Best Choice condition, would experience their engagement in the decision-making process as one involving the use of proper means, and this would increase their perception of the value of the chosen mug. This prediction was confirmed. Participants in the Right Way condition offered significantly more money for the chosen mug ($M = \$4.84$, $SD =$

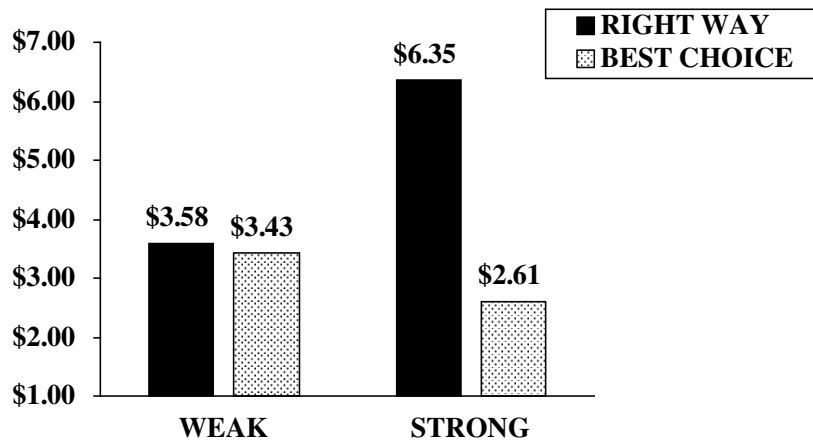


FIGURE 3. Belief in Using Proper Means.

Mean price offered to buy the chosen mug by type of decision emphasis and strength of orientation to proper means.

3.15)—almost 70% more money—than participants in the Best Choice condition ($M = \$2.91$, $SD = 1.99$), $F(1, 42) = 5.92$, $p < .02$.

Neither positive mood, perceived efficiency (ease), nor perceived effectiveness (instrumentality) varied significantly as a function of type of decision emphasis or level of orientation to proper means (all F 's < 1). Moreover, the greater amount of money offered to buy the mug by participants in the Right Way than the Best Choice condition remained significant when positive mood, perceived efficiency, and perceived effectiveness were included as covariates in the analysis, $F(1, 39) = 4.98$, $p < .03$.

A median split was performed on the level of participants' strength of general belief in the importance of pursuing goals in a proper way, yielding a group with relatively strong beliefs and a group with relatively weak beliefs. An analysis of variance was then performed on money offered to buy the chosen mug as a function of type of decision emphasis, strength of general belief in the importance of using proper means (strong *vs.* weak), and the interaction of these two variables. In addition to the main effect of type of decision emphasis already described, there was a significant interaction of type of decision emphasis and strength of general belief in the importance of using proper means (strong *vs.* weak), $F(1, 40) = 5.53$, $p = .02$. Specifically, as predicted, when making a decision in the right way was emphasized, the stronger a participant's general belief in the importance of using proper means in goal pursuits, the more money that participant offered to buy the mug (see Figure 3). Planned contrasts, $t(38) = 2.10$, $p < .05$, revealed that the participants who were in the condition that emphasized making the decision in the proper way and who had a strong belief in the importance of pursuing goals in the proper way offered much more money to buy the mug than the participants in each of the other three conditions—on average, more than 90% more. The other three conditions did not differ significantly from each other.

STUDY 2B

METHOD

Participants

Twenty-four Columbia University students (12 male and 12 female) participated in the experiment after completing another 30-minute experiment. They were told that there would be no monetary compensation for this experiment, but that they would receive a gift for participating. There were no significant effects of gender, and all participants indicated that English was their native language. All participants chose the mug over the pen.

Procedure

Note: Because we were asking participants to volunteer for this additional experiment after their having completed another experiment, we did not have time to administer the “orientation to using proper means” questionnaire.

Participants were presented with the choice between a Columbia University coffee mug and an inexpensive disposable pen. Participants were randomly assigned to the same Right Way and Best Choice conditions used in Study 2a. As in Study 2a, the experimental manipulation of decision emphasis was always given to participants *before* they made their choice. As in Study 1a, participants were told they would receive the object they chose as a gift, rather than having to bid money on it, and were simply asked to indicate how much they thought the mug was worth. Specifically, they were shown a more expensive reference pen (not the pen that was one of their choices) and were asked, “If the price of the reference pen is \$3, what do you think is the price of the coffee mug you were offered?” In addition, after this item we asked participants, “If the price of the reference pen is \$3, what do you think is the price of the PaperMate pen you were offered?”

After the monetary measures were collected, participants completed a measure of their current mood (how good, happy, sad, relaxed, positive, cheerful, tense, and content do you feel right now), as well as measures of their perception of the efficiency and the effectiveness of their decision-making process. Each item was to be marked on a 9-point scale (from 1 = not at all to 9 = extremely). At the end of the study, participants were given the mugs, debriefed, and thanked for their participation.

RESULTS AND DISCUSSION

We predicted that, as in Study 2a, participants in the Right Way condition would list higher prices for the chosen mug than would participants in the Best Choice condition. Furthermore, we predicted that participants in the Right Way condition would *also* list higher prices for the *pen*, which they did not choose, than would participants in the Best Choice condition. The rationale for this latter prediction is that the hypothesized mechanism involves an experience of increased engagement from making a decision in a proper way that intensifies subsequent reactions to

an object of evaluation, and *both* the mug *and* the pen are positive objects of evaluation during the decision-making process. An analogous prediction and finding for the regulatory fit effect was found in Study 3 of Higgins et al. (2003)—*both* the mug and the pen increased in monetary price in the fit condition compared to the nonfit condition.

To test these predictions, we first separately transformed mug prices and pen prices into z-scores. A mixed-design Analysis of Variance (ANOVA) with the between-participants factor *decision emphasis* (*Right Way*, *Best Choice*) and the within-participants factor *object* (*mug*, *pen*) was performed on the (standardized) prices participants listed for these two objects. Our predictions were confirmed. Specifically, the ANOVA revealed only the expected main effect of decision emphasis, $F(1,22) = 6.60, p < .02$, such that participants listed higher prices for the objects in the *Right Way* condition than in the *Best Choice* condition. The decision emphasis X object interaction was not significant, $F < 1$. This suggests that the general effect of decision emphasis on listed price did not differ across the mug and the pen. Simple effects tests revealed that participants listed significantly higher prices in the *Right Way* than in the *Best Choice* condition for *both* the mug ($\$6.56, SD = 2.35$ vs. $\$4.87, SD = 1.84$), $F(1,22) = 3.86, p = .06$, and the pen ($\$0.56, SD = .33$ vs. $\$0.34, SD = .15$), $F(1,22) = 4.28, p = .05$ (all values reported are untransformed means). As in Study 2a, decision emphasis did not affect positive mood, perceived efficiency, or perceived effectiveness (all F 's < 1). Moreover, the effects of decision type on prices remained significant, even when positive mood, perceived efficiency, and perceived effectiveness were included as covariates in the analysis, $F(1,19) = 6.51, p < .02$.

In this study we were also interested in examining more directly whether participants in the *Right Way* condition engaged in the decision making process differently than participants in the *Best Choice* condition. Previous work has shown that increased engagement leads to greater attention to the central merits of an activity (Bianco et al., 2003; Cesario & Higgins, 2007). Given that the mug is a positive object and was selected to be the dominant choice, we believed that stronger engagement in the *Right Way* (vs. *Best Choice*) condition might lead to greater attention to the positive attributes of the mug, reflected by an increase in the number of positive mug attributes noted in the *Right Way* (vs. *Best Choice*) condition. To examine this possibility, participants' responses were coded as to whether they referred to the mug or the pen, and within object, whether the attributes described were positive or negative. In fact, for the number of positive mug attributes listed, there was some evidence of stronger engagement in the *Right Way* condition ($M = 2.42, SD = 1.08$) than in the *Best Choice* condition ($M = 1.83, SD = .58$), $F(1, 22) = 2.71, p = .11$. This difference was also reflected in the *proportion* of positive attributes that participants listed about the mug (*Right Way* = 83%; *Best Choice* = 69%), $F(1, 22) = 2.98, p = .10$. Although only marginally significant, these findings provide some additional evidence that perceiving oneself as making decisions in a proper way can strengthen engagement in the decision-making activity.

Given that the mug was experimentally manipulated to be the dominant choice, we believe that it was the positive attributes of the mug that had central merit during the decision process and thus could serve as a measure of engagement strength. It is important to emphasize, however, that we are *not* suggesting that the higher valuation of the mug in the *Right Way* condition was driven by this greater attention to the mug's positive attributes. Instead, the increased value of the mug

in the Right Way condition is hypothesized as deriving from stronger engagement (from choosing in a proper way) that intensifies the attraction response to the mug. On the other hand, increased attention to the positive hedonic properties of the mug *should* increase the mug's attractiveness in the Best Choice condition given that value in this condition is hypothesized as deriving from the anticipated hedonic outcomes of choosing the mug (i.e., the mug's positive attributes). Two findings support this reasoning. First, the difference in object value between the Right Way and Best Choice conditions remained significant even when the number of positive attributes of the mug listed by participants was included as a covariate in the analysis, $F(1, 21) = 3.93, p = .06$. Second, and most intriguing, the correlation between the number of positive attributes of the mug listed by participants and the monetary value assigned to the mug was highly significant in the Best Choice condition, $r = .79, p = .002$, but was *not* significant in the Right Way condition, $r = .37, p > .20$. These two findings provide additional support for our proposal that making decisions in a proper way increases the value of a positive choice via a mechanism that is different from solely the hedonic consequences of that choice.

CONCLUDING COMMENTS

The present studies found for the first time that when decision makers perceive that they are making their choice in a proper way, it increases attraction to the chosen object itself, as reflected in its perceived monetary value. The results of our studies support March's (1994) proposal that pursuing goals in an appropriate way has its own relation to value creation that is separate from but comparable to the logic of rational instrumentality. Our studies support his proposal in a novel manner by showing that the chosen object itself can increase in monetary value when the decision was made in a proper way.

It should be emphasized that we are *not* proposing that the experience of making decisions in a proper way will always increase attraction toward a value target. Instead, the prediction is that making decisions in a proper way increases the intensity of the response to the value target—an intensified force of attraction *or* repulsion. If the choice alternatives were negative and none were chosen, for example, then making a decision in a proper way would increase repulsiveness from them. Although this prediction has not been tested yet, there is evidence that a negative response to an object is intensified when people are in a state of regulatory fit (Cesario, Grant, & Higgins, 2004). It should also be emphasized that, at this point, we know more about how to manipulate sources of engagement strength than we know about how to measure engagement strength itself. Thus far, the measures have been arm pressure while performing a task, persistence on a task, level of task performance, and increased attention to the central attributes of a focal object (see Higgins, 2006). There is a need to develop other measures of engagement strength that will both suit its level of analysis and permit more direct tests of its hypothesized role in value creation. These measures will also need to distinguish engagement strength from other related variables (e.g., arousal). This will be a major challenge for the future.

A final comment. In our studies, instead of the ends justifying the means, using a justified process or the right way to make a decision increased the perceived monetary value of the *ends*. From this new perspective, there need not be a conflict

between doing what is right (Superego) and wish fulfillment (Id) because making decisions in the right or proper way makes the value of one's choices increase. From a quality-of-life viewpoint, it would make sense to pursue positive goals in a way that you believe is right or proper because not only would you be more satisfied with the process but you would also experience more value *in the outcome itself*. Perhaps, Santa Claus understood this all along. In order to receive Christmas gifts, children must "be good for goodness sake." By believing that their gifts depend on their behaving properly, children not only behave properly in order to receive them—a goal pursuit process that is both instrumental and proper—but the gifts themselves increase in value. There is a lesson there for all of us, even if you don't believe in Santa Claus.

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