

THE BENEFITS OF TANGIBLE NON-CASH INCENTIVES

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ABSTRACT

Economic theory predicts that cash is always a better incentive than any non-cash reward of equal market value due to the fungibility associated with cash; there is also evidence that people's stated preferences follow this maxim. However, psychological research explored in this paper suggests that rewards based on this stated preference are not necessarily those for which the most effort is exerted. This paper introduces the psychological constructs of social reinforcement, justifiability, separability, and evaluability and discusses ways in which they may increase the motivational power of tangible non-cash incentives relative to their value in cash.

Firms in the United States spent over four trillion dollars on payroll in the year 2000. When benefits are included, this figure rises to nearly \$6.6 trillion dollars of total labor costs (Mannering & Petrick, 2003). Even without employment taxes and insurance costs, this figure represents more than 60% of the US gross domestic product for that year. Therefore, motivating employees to maintain an optimal level of performance is a critical issue for firms. A lump sum cash bonus is one method of motivating employees. For example, a firm might give a salesperson a \$5,000 bonus for exceeding his or her quota for the year. Alternatively, the firm could provide high-end merchandise or vacation travel such as a trip to Hawaii with a market value of \$5,000. The term “tangible non-cash incentive” will be used to describe incentives such as a trip to Hawaii which are contingent on performance, financial but non-cash, and have non-trivial market value. Firms in the United States spent over \$20 billion on tangible non-cash incentives in 1999 (Incentive Federation, 2000). While this is a small fraction of the total U.S. payroll, it is still a substantial amount of money. Therefore, understanding why and when to use tangible non-cash incentives rather than cash is an important endeavor. Furthermore, there is limited research on the most effective type of extrinsic incentives to use; therefore, a significant amount of money is being spent on tangible non-cash incentives with a limited understanding of how they can best be utilized. This paper will address the use of tangible non-cash incentives and will explore the psychological phenomena that cause this type of incentive to motivate employees more than an equivalent cash bonus.

The \$20 billion spent annually on tangible non-cash incentives is inconsistent with classical micro-economic theory. Neo-classical economics makes the claim that money is always better (or, at least, no worse) than any non-cash incentive of equal

market value because money is fungible; that is, cash can be used to purchase an infinite number of items with equal market value (List & Shogren, 1998; Waldfogel, 1993, 1996). Furthermore, if a firm were to choose a non-cash incentive, it could do no better than matching exactly what a person would have chosen for him or herself. In fact, the firm will generally do worse, since it is difficult to know another's preferences exactly, much less those of all employees. If given a cash award, an employee could buy the particular incentive offered by the firm or some other item that would provide more utility. Consistent with this economic theory, most people state a preference for cash incentives when given a choice between a tangible non-cash incentive and the cash equivalent (Hein, 1998). The choice of cash would also be predicted by work on reason-based choice (Shafir, Simonson, & Tversky, 1993); there are more "rational" reasons to choose cash over a trip (e.g., to pay bills, save for retirement, college). However, when asked to evaluate these items separately, people predict they will receive more satisfaction from obtaining the tangible non-cash incentive (Arkes, Shaffer, & White, 2004). Furthermore, employees receiving tangible non-cash incentives outperform those receiving cash, making tangible non-cash incentives more motivating than cash (Alonzo, 1996; Jeffrey, 2004). This discrepancy essentially constitutes a "preference reversal"; when evaluated in isolation employees indicate that they are more satisfied with tangible non-cash incentives but when asked to choose between this award and the cash equivalent, employees exhibit a strong preference for the cash (Arkes et al., 2004).

There is a rich tradition in the judgment and decision making literature on preference reversals, beginning with research that probability of payoff and payoff amount were weighted differently in choice vs. pricing tasks (Grether & Plott, 1979;

Slovic & Lichtenstein, 1968, 1983). In this research, probability of winning was more important when choosing a lottery, while the payoff was more important when stating willingness to pay. Other researchers have discovered other types of preference reversals such as choice-matching (Tversky, Sattath, & Slovic, 1988), mode of probability presentation (Gonzalez-Vallejo & Wallsten, 1992), and joint versus separate evaluation (Hsee, 1996b; Hsee, Loewenstein, Blount, & Bazerman, 1999).

Hsee and colleagues work on preference reversals in joint versus separate evaluation modes are the most relevant to this line of research. They demonstrated that item A would be chosen in the separate evaluation mode (where each item is evaluated in a between subjects conditions), but item B would be chosen when the items were presented in joint evaluation mode (items are evaluated together in a within subjects condition). In our case, stated preference for an incentive is clearly a case of joint evaluation—“which of these do I prefer?”—while the both the decision to exert effort in pursuit of an incentive—“how hard will I work for this particular incentive?” and the rating of satisfaction—“how happy am I with this particular incentive?” are cases of separate evaluations. Hsee and colleagues further demonstrated that this effect was based on the fact that some qualities of items can only be evaluated in a joint context; that is a comparison with other items is required to gain a perspective on the quality of a certain characteristic. For example, the number of words in a dictionary is a difficult quality to evaluate without comparing the quality to other dictionaries. However, we believe that the preference reversal exhibited between joint and separate evaluation modes has a unique cause. That is, with incentives the JE mode highlights the fungibility of cash, this property of cash is not primed in the SE modes, and therefore the tangible non-cash

incentive is preferred to the cash bonus. Other research shows evidence of an inconsistency between stated preference and motivation. For example, Hsee and colleagues (1999) showed that people do not always choose the item that they believe will provide the most utility. In a series of experiments, decision makers were presented with a choice between two items and asked to predict which one would be more enjoyable prior to selecting one of the items for consumption. Choice sets were designed so that one of the two goods would appear somehow “better” in pure economic terms (e.g., higher quantity, larger, more expensive), while the other item would appear more pleasant. Participants in these experiments often predicted that they would receive more enjoyment from the more pleasant item, yet chose to receive the economically “better” item. For example, one choice set consisted of a smaller chocolate bar shaped like a heart (more pleasurable), and a larger candy bar shaped like a cockroach (presumably a better objective value but less pleasurable to consume). Participants often predicted that they would enjoy the heart more than the cockroach but chose to receive the cockroach anyway. It was hypothesized that participants in these experiments did not feel justified in choosing the option that they felt would provide more utility. This caused participants to choose what they felt they *should* prefer, causing this apparent preference reversal.

While there has been extensive research in both economics and management regarding the use of incentives, the bulk of this work addresses the question of whether or not to offer an extrinsic incentive and whether that incentive will reduce the intrinsic motivation to perform a task (Amabile, 1998; Amabile, Hennessey, & Grossman, 1986; Banker, Lee, Potter, & Srinivasan, 1996; Bloom & Milkovich, 1998; Collins & Amabile, 1999; Deci, 1971; Deci, Koestner, & Ryan, 1999; Deci & Ryan, 1985; Eisenberger,

Rhoades, & Cameron, 1999; Frey, 1997; Gerhart & Trevor, 1996; Jordan, 1986; Kruglanski, 1975). In addition to this debate, research has also been done on how extrinsic rewards interact with other motivational tools such as goals (Jessup & Stahelski, 1999; London & Oldham, 1976; Tolchinsky & King, 1980), job design (Futrell, 1979; Gallager & Einhorn, 1976; Kelly, 1992), and job challenge (Radhakrishnan & Ronen, 1999). A large body of research also exists on psychological interventions and their impact on performance (Guzzo, Jette, & Katzell, 1985). Rather than extend the debate between extrinsic versus intrinsic motivation (e.g. Beer & Cannon, 2002; Kohn, 1993), we will focus on the use of tangible non-cash incentives as an extrinsic incentive and how they affect behavior. This paper will explain and explore the psychological concepts of justifiability, evaluability, social reinforcement, and separability and examine how they affect the motivational properties of tangible non-cash incentives.

THE PSYCHOLOGY OF TANGIBLE NON-MONETARY INCENTIVES

In this paper we will begin to examine some psychological constructs that could cause tangible non-monetary incentives to reduce or eliminate any natural advantage of a cash incentive. This section will propose some of these processes which may increase the inherent value of a tangible non-monetary incentive as well as the value of the effort required to earn such an incentive.

Many theories of motivation implicitly assume that effort, while a function of many things, is positively correlated with the valence of the award earned for the products or output of that effort (Naylor, Pritchard, & Ilgen, 1980). Expectancy theories of motivation (Bandura, 1986, 1997; Porter & Lawler, 1968; Vroom, 1964) also hold that the effort exerted in pursuit of a reward is positively related to the valence of the reward

offered for performance. Consistent with this and many other valence based theories of motivation, the propositions put forward in this paper will assume that employees exert effort to “maximize anticipated affect” (Naylor et al., 1980). This anticipated affect is associated both with the valence of the award itself and any additional positive affect gained through earning the incentive rather than purchasing it. This section will discuss the psychological constructs of social reinforcement, justifiability, separability, and evaluability and identify ways in which these factors will increase the anticipated affect of tangible non-cash incentives relative to their value in cash.

Justifiability

One feature of many tangible non-monetary incentives is that they are things the recipients see as luxuries; things that employees could not normally justify buying for themselves, even if they had sufficient funds. If an item is something that an employee values highly but would never purchase on his or her own, then the opportunity to earn it as a reward for hard work provides a way to obtain the desired object without violating one’s standards of justification (Hsee, 1996a). For example, a salesperson might never propose that his or her family take an expensive and “frivolous” trip to Hawaii, but everyone might be pleased if it were earned as a reward for hard work. If the employee is constrained to accept the award available, there is no need to justify its consumption. This is demonstrated in the work by (Arkes et al., 2004) which showed the effect of the luxuriousness of a bonus on its preference in separate and joint evaluation conditions. Several possible non-monetary incentives (of similar monetary value) were selected and rated by participants on their perceived luxuriousness. From each end of the scale, one item was chosen. Both the items low and high in luxuriousness were rated in the separate

evaluation condition (how satisfied are you with your bonus?) and the joint evaluation condition (how much would you prefer this item to cash?). For items that are low in luxuriousness, the previously observed preference reversal disappeared; that is, in isolation, participants indicated they were more satisfied with cash and, in joint evaluation, the participants indicated that they would prefer the cash to the non-monetary incentive. However, for items that were high in luxuriousness, participants were indifferent between the non-monetary incentive and the cash, but, in a joint evaluation, participants indicated that they would prefer to receive cash. Hard work thus becomes an attractive means to acquire a good that would be difficult to obtain through other means, causing the earning of a tangible non-monetary incentive to carry more value than earning the market value of the incentive in cash.

Proposition 1: The perceived value of an incentive will increase with the difficulty the employee would have in justifying the purchase of that incentive with his or her own funds.

Since the determination of what is a justifiable purchase will differ, the strength of this effect will no doubt vary across national and organizational cultures as well as among people with different incomes. In cultures where spending money on whatever one wishes is acceptable, this effect will not be as strong. In the presence of stricter social guidelines regarding appropriate purchases, employees would receive more utility from being able to earn a difficult to justify incentive for hard work since it would be less likely that they could purchase it on their own.

Justifiability concerns would also drive a stated preference for cash over a non-cash incentive. Choosing an item over cash may be psychologically equivalent to purchasing that item. Therefore if justifiability concerns preclude the purchase of an item,

they would also preclude choosing that item over the market value of that item in cash. If employees view a tangible non-monetary incentive as an expensive and seemingly frivolous item, not something they would feel justified in purchasing (or choosing) for themselves, then they would be likely to choose cash. This may explain the stated preference for cash that has been found in some studies (Hein, 1998).

Social Reinforcement

One of the most important rewards for a job well done is the acknowledgement of one's performance by peers, supervisors, family, and friends. The value of this social reinforcement comes from others knowing about the good performance rather than the receipt of an incentive per se. This is one of the central tenets behind most reinforcement theories of motivation (Alport, 1954; Bandura, 1969; Hamner, 1974; Luthans & Stajkovic, 2000; Mahoney, 1974; Stajkovic & Luthans, 1997).

A tangible non-monetary incentive may be more effective than cash awards at enhancing this social utility because this class of award is a visible award that others will know about, making it unnecessary for the employee to advertise that he or she earned the incentive. Rather, friends and colleagues may broach the subject of the award with questions like, "So Bill, how are those golf clubs you earned from the firm? Have you played with them yet?" While cash may also be highly visible, it is less socially acceptable to say, "So Bill, how's the \$1,000 you earned from the firm?" This enhances the social utility available through the earning of a tangible non-monetary incentive.

Because of its visibility, the valence derived from social reinforcement available from a tangible non-monetary incentive will come without the need to tell anyone about his or her performance. Even if it were necessary to discuss it, it would be easier to do so

with a non-cash incentive due to social proscriptions regarding the discussion of cash (Krueger, 1986, 1991; Trachtman, 1999; Webley, Lea, & Portalska, 1983; Webley & Wilson, 1989). In most situations, employees would not feel comfortable bragging about cash, but would feel free to talk about golf clubs or a vacation they received from the firm. By providing a better means to indirectly bring attention to one's good performance, the value of earning a tangible non-monetary incentive is enhanced relative to the cash value of the incentive.

An additional side benefit to the use of tangible non-monetary incentives is that they serve as reminders of the exemplary performance that led to their award. Physical goods like a big screen television will remind the employee of their performance and the firm every time they turn it on. Vacation travel will provide memories, pictures, and mementos that will do the same thing. Cash awards can also do this provided they are awarded with some physical marker such as a certificate or a plaque of some sort, but to a lesser degree. The utility of earning a tangible non-monetary incentive is enhanced by the visibility of the award and the absence of social norms against discussing this type of award.

Proposition 2a: The perceived value of an incentive will increase with the social utility of the award.

Proposition 2b: The social utility of an award will increase with the ease with which that award can be discussed with others.

The employee could feasibly buy something frivolous like expensive golf clubs with a cash bonus, provided they could clear the justifiability constraints discussed earlier. In fact, research shows that the marginal propensity to consume windfall gains is higher than that of expected income such as salary (Arkes et al., 1994; Thaler & Johnson,

1990), yet the question remains whether it will be spent on “splurge” items or more functional and “rational” items. There is some evidence that people know they are likely to spend windfall money on more utilitarian items (Kivetz & Simonson, 2002). Thus, it is unlikely that employees would spend bonus money on frivolous items such as those used as tangible non-monetary incentives.

Even if the employee were to purchase the incentive the firm offered, it would not carry the same social reinforcement as if it were awarded by the firm. Once the money is given to the employee it becomes the employee’s money and therefore anything purchased with it is something the employee chose to purchase rather than something the firm awarded to the employee. Family, friends, and colleagues will also be more likely to view the trip or other purchase as something the employee bought rather than something he or she received for good performance. In addition, even saying that the employee bought it with a cash bonus might be perceived as too much like bragging about cash. These issues make the link between the company and the award weaker and so would not provide the same means of discussing good performance.

The nature of reinforcement obtained from a tangible non-monetary incentive is likely to vary across organizational and national cultures. Some organizational cultures have fewer proscriptions against discussing cash bonuses. For example, investment bankers are often expected to brag about their income. On a societal scale, social recognition lavished on an individual in a collectivist culture might lead to less utility conveyed from the award, whereas earning admiration from one’s group may be highly valued (Hofstede, 1980; Markus & Kitayama, 1991). However, these forces will still enhance the social utility of an award if it is given to a group rather than an individual.

An employee can still feel proud about their group's performance and this feeling can be enhanced by the visibility of a tangible non-monetary incentive.

Separability

People do not consider all of their income and assets collectively. They mentally segregate some sources and uses of funds and aggregate others (Thaler, 1980, 1985, 1999). Subsets of income may be assigned to different "mental accounts." For example, investment income and home appreciation are likely to be placed into different income accounts than salary would be. Since a cash bonus is earned as part of the job, it is likely that it will be mentally combined with the rest of the employee's employment income. If this occurs, the neutral reference point for evaluating the cash bonus will be the employee's base salary, and will make the award more subject to the value-reducing effects of diminishing marginal utility (Kahneman & Tversky, 1979). A company could combat this to some extent by issuing a separate check, or by having a ceremony or plaque to commemorate the performance. However, it is likely that employees will retain the strong tendency to view this money as an increase in total compensation and aggregate it into their mental account for salary. Because items which firms use for tangible non-monetary incentives are consumed less frequently, they would be considered in relative isolation, or at least placed into a smaller, more specific mental account (e.g., Travel, Entertainment). The neutral reference point for evaluation of the incentive will be zero (no item) rather than the employee's base salary, or as a large increase to a small mental budget. This will lead to less impact from diminishing marginal utility relative to a cash incentive.

Proposition 3: The perceived value of an incentive will increase with the likelihood that it will be evaluated in isolation or as part of a smaller set of items.

Evaluability

Firms often use hedonic goods or services as non-cash rewards; items that are associated with pleasurable experience rather than more instrumental or functional items (Dhar & Wertenbroch, 2000). When considering whether to exert additional effort in pursuit of a bonus award such as this, the employee must predict what the item offered is worth to them; i.e., the predicted consumption utility of the award (Kahneman, Wakker, & Sarin, 1997). The hedonic nature of the incentives triggers an affective reaction to the incentive that becomes a more salient attribute than the cash value of the incentive. Because these feelings are difficult to monetize, the affective reaction to the award will be used as a proxy for the predicted utility of the item (Hsee, 1996b; Loewenstein, Weber, Hsee, & Welch, 2001; Schwarz & Clore, 1988). Non-monetary cash incentives will have more affective value than their monetary equivalent; therefore, as discussed earlier, when the monetary and non-monetary bonuses are evaluated in isolation, potential employees will evaluate the non-monetary incentive as more satisfying than the cash bonus. However, in a joint evaluation between the cash and non-cash bonuses, the monetary value of the award would become the salient attribute for comparison. But, since the decision to exert effort is based on a separate evaluation of the award, the affective response to the incentive serves as a proxy for utility.

Hedonic awards such as an expensive trip have both positive and negative attributes, some of which are vivid while some are comparably pallid. In general however, the vivid attributes of these incentives tend to be more positive than negative. For example, trips to exotic locations such as Hawaii have positive affective attributes like good weather, beaches, and fine dining. The more negative attributes tend to be more

pallid than vivid, such as having to stop the mail or finding a pet sitter. Research has shown that vivid items are used more frequently than pallid items when forming an attitude regarding an item (Kisielius & Sternthal, 1986; McGill & Anand, 1989; Taylor & Thompson, 1982). This tendency to more easily imagine positive items will raise the perceived value of the award above the cash value of that award. A related line of research has shown that items to be received in the future are evaluated on higher level attributes and only when an event becomes proximal in time do people think about the more pallid, logistical issues (Trope & Liberman, 2000). This should also encourage employees to think about the more positively valenced hedonic aspects of something like a trip to Hawaii and raise the predicted utility of the incentive. It is critical to note that this will only work with a positively valenced, hedonic non-monetary incentive. For example, a certificate for a free root canal, while quite vivid and affect laden would not trigger the positive emotions necessary to enhance motivation.

An affective evaluation also leads to a higher level of ambiguity in value. This allows for employees to cognitively alter the predicted utility of the award. Cognitive dissonance research suggests that if an employee is working hard to achieve the award, then he or she will attempt to convince themselves that the award is worth a great deal to them, bringing their beliefs in line with their actions (Bem, 1967; Festinger, 1958; Quattrone, 1985). This can increase the perceived value of a tangible non-monetary award through a virtuous circle. The harder the employee works towards an award, the more he or she will think it is worth. This, in turn, leads to more effort. This is not likely to occur with cash awards since the economic value of cash is less ambiguous and less prone to the psychological modification of perceived value.

Proposition 4: The perceived value of an incentive will be enhanced by the degree to which it is evaluated in an affective rather than cognitive manner.

An employee could also psychologically lower the value of the award under certain conditions. Much as Aesop's fox convinced himself that grapes just out of his reach were probably sour, employees who are not likely to earn an award may be able to tell themselves that the award is not as valuable as they initially believed it to be. The ability to raise or lower the value of the outcomes of performance allows an employee to bring himself or herself back into an equity "equilibrium" without resorting to negative behaviors such as leaving the firm, reducing effort, or sabotaging others (Adams, 1965). While it is true that believing the award is of less value might reduce effort, it will also diminish the likelihood that an employee will engage in dysfunctional behaviors towards the firm or other employees.

Other Potential Benefits

The firm may receive additional benefits from specific rewards. Vacation travel might pay back in improved productivity for rested employees. Providing free stays in the other properties of a hotel chain allows employees of that hotel to become more knowledgeable about them, which makes them more valuable employees. Also, if there is reason to believe that non-monetary rewards attract a specific type of employee, and that type of employee is more productive in a certain type of firm, then providing this type of incentive can help attract a better group of employees for that company. For example, a hotel wants to attract employees who like hotels. By awarding employees stays in corporate properties, people who enjoy hotels will self-select into those firms.

Bonus systems are generally concerned with performance over a specified period of time. Rewards are often offered for meeting sales goals, production goals, cost

reduction goals, and other similar goals. To achieve this level of performance, employee output—and therefore effort—must achieve some average level over the performance cycle. Consider, for example, a production team that must meet its monthly quota to receive a performance bonus. In order to reach this level, they may plan out how much they need to produce each day or week. This will translate into the effort level that must be applied on average to reach the goal and earn the award.

In contrast, the calculus of expectancy theory is based on marginal calculations. While an employee or team might be able to calculate the overall level of performance and effort required to earn a reward, at many moments in time each employee attempts to determine whether additional effort at that point in time is worthwhile. From an economic standpoint, in order for an employee to exert additional effort, the marginal cost of that effort must be less than the predicted utility of the award multiplied by the increase in the probability of earning the award, given the additional effort. If it is not, then the additional effort will not be forthcoming (Eisenhardt, 1989; Holmstrom, 1979).

Consider a salesperson leaving a client site at 4:30 on a Friday. He or she could make one additional sales call, or get an early start on the weekend. The employee will make this decision by comparing the cost of this additional effort with the potential reward for additional outcomes. The cost of this effort will be salient, since the salesperson will be cognizant of their physical and emotional state, however the benefits of the additional effort such as additional commission or a bonus may be less salient. If this is the case, the costs of effort will be over-weighted relative to any potential benefits of the additional effort. To counteract this tendency, the firm must try to make sure that the rewards for effort are salient in the employee's mind while he or she is making the

marginal decision to apply effort. Research has shown evidence of savoring for hedonically rich items but not for cash (Loewenstein, 1987; Loewenstein & Thaler, 1989). These researchers found that people would prefer to delay a kiss from their favorite movie star but would not prefer to delay the receipt of a cash award. The increased vividness and savoring of an affect rich item such as the ones often used as tangible non-monetary incentives makes the employee more likely to perceive increased effort as worthwhile.

Even though there is evidence that non-cash awards can be more motivating than their market value in cash, there may be additional pecuniary benefits that accrue to firms that use tangible non-monetary incentives. These advantages stem from the possibility that a firm may be able to acquire these goods at a lower cost than an employee could. Take for example a trip to Hawaii for which an employee would have to pay \$5,000. Potential recipients might only find the trip to be as valuable to them as, say, \$3,500 in cash; less than its retail cash value. Through some arrangement, this award might be available to the firm for \$3,000. This would make the tangible non-monetary incentive more efficient at motivating this employee than the cash cost to the firm since the firm receives the motivational power of something worth \$3,500, but only needs to pay \$3,000.

The use of company products or services as awards is one mean by which a firm could provide incentives at a lower net cost. Hotel chains often reward their employees with stays in corporate properties; travel agents might reward their employees with discounted trips; and automobile manufacturers could provide new cars to top performers. Even if the firm must purchase the award, it might receive a volume discount

unavailable to an employee, or, at the very least, save the employee the transaction costs required to obtain the item. In the extreme, a firm could offer an incentive that the employee could not purchase at any price. For example, pink Cadillacs cannot be purchased directly from General Motors; they can only be awarded by Mary Kay Cosmetics. Luxury boxes at sports venues and hospitality tents at golf tournaments, which are controlled by corporations, are similarly out of the reach of most employees. Presumably, the fact that these are unobtainable except through the firm makes them more valuable than the cash it would cost the firm to provide them.

IMPLICATIONS FOR INCENTIVE DESIGN AND PROGRAM IMPLEMENTATION

In order to capitalize on the proposed factors of justifiability, social reinforcement, evaluability, and separability, the right incentive must be chosen and the program must also be implemented correctly. This section will discuss the selection of awards, the implementation of award programs, how to potentially enhance cash incentive programs, as well as discuss some potential drawbacks of tangible non-monetary incentives.

Selecting the Incentive

The incentives chosen should be unique so that the award is evaluated in relative isolation, thereby exhibiting less impact from diminishing marginal utility. This also suggests that the award must be changed over time; if the item is given frequently, it may quickly become “more of the same”, making it subject to the value reducing effects of diminishing marginal utility. The chosen award should also be hedonic rather than utilitarian in nature. Not only does this make the award’s purchase less justifiable, but it

will also trigger a more affective reaction, necessary for the value enhancing evaluation process discussed earlier. A cold cognitive evaluation of the award will not allow for these value enhancing processes, and will also make the loss of option value associated with a non-cash incentive more salient.

To increase the perceived value of earning the award, the prize should be something that is infrequently purchased. If the employee is less likely to purchase the item on his or her own due to justifiability concerns, this will increase the value of earning the award, and thus increase effort expended in pursuit of that award. Social reinforcement can also be increased by using an infrequently purchased item or service as an incentive. Since these items are not frequently purchased, these types of awards are easier to use as a means to discuss the performance that led to their receipt. In addition, items that are not frequently purchased are likely to attract the attention of colleagues, increasing the so-called “trophy value” of the award. Since the employee’s colleagues, friends and family will admire the award, it will be easier to use that award to broach the subject of the performance that led its receipt.

Implementation

To encourage an emotional rather than cognitive evaluation of the prize, employees should not be told the market value of the prizes for which they are working. If there is a monetary value attached to the prize, it becomes more like cash, and will be more likely to trigger a cold cognitive evaluation. Knowing the value of the prize also makes it more difficult for the employee to psychologically alter the predicted utility of the award. This will reduce the ability of the employee to mentally increase the value of

the award while working towards it or to decrease the value when it appears that the award will not be earned.

To make it more likely that the employee will increase effort in the moment, the firm should keep the reward for good performance salient in the employee's minds. One way to accomplish this is by constantly reminding employees of the prizes available for specific levels of performance. Since tangible non-monetary incentives are naturally more available in an employee's mind while working, the firm does not need to take this action as frequently as they would have to with a cash award. In addition to this benefit, if employees are frequently thinking of the hedonic attributes of the award, this will trigger an affective evaluation process which will tend to increase the perceived value of the item.

There is one additional point that is important for the design and implementation of non-monetary incentives. As discussed in the introduction of the paper, cash awards can be used by the employee to purchase that item which carries the most utility. Non-cash awards do not generally have such flexibility, even if the award is something "near cash" like a gift certificate. The general problem with non-cash rewards is that the firm cannot be sure to pick something that every targeted employee likes. Some employees will find the chosen prize to be more valuable than others find them. On average, this will make a non-monetary award less motivating to the employee population as a whole (Waldfogel, 1993). A way to solve this problem is through the use of a cafeteria style incentive program. For each performance level, employees should be able choose from a list of prizes, so that they can receive the prize that they like the best. This will still

capture the benefits of non-monetary incentives; yet minimize the downside associated with diverse employee tastes.

Enhancing Cash Awards

The theories presented in this paper could also enhance the value of earning a cash incentive. For example, a firm might try to encourage employees to think about “splurging” their cash bonuses on hedonic items such as those used as tangible non-monetary incentives. By planting the idea in the employee’s mind that they will purchase some difficult to justify hedonic item, the firm might be able to capture the additional effort associated with justifiability concerns as well as the capture the benefits of an affective evaluation. However, it is unclear whether this would be as effective as simply using a tangible non-monetary incentive.

To increase the social utility associated with a cash award, firms can and often do provide ceremonies and plaques or certificates of achievement along with a bonus award. While it may be difficult to use a cash prize to broach the subject of performance, there would be fewer restrictions on doing so using a certificate or plaque. Again, it is unclear whether this would be as effective as simply using a non-monetary incentive. Colleagues may perceive any discussion of the plaque or certificate as boasting because it has no inherent value except as a symbol of the performance, thus reducing the social utility of the plaque or certificate relative to a tangible non-monetary incentive.

Keeping any award salient can increase effort per unit value, and therefore frequent reminders of the rewards available for performance might work for cash awards as well. If these actions make the cash rewards more salient in the employee’s mind, it becomes more likely that the employee will decide to exert more effort at the margin.

However, there is a danger in using this strategy for cash rewards. Continually reminding employees that they are working for a cash reward reinforces an exchange relationship, which fosters the belief that the employee is only performing the task for money (Fiske, 1992; Mills & Clark, 1982). This has possible negative implications with respect to organizational commitment, pro-social behavior, and intrinsic motivation (Brief & Motowidlo, 1986; Deci et al., 1999; Mowday, Porter, & Steers, 1982; Organ, 1988).

DISCUSSION

We have proposed four psychological mechanisms that we believe increase the anticipated value of a tangible non-cash incentive, and thereby increase employee performance in pursuit of that incentive. Any, none, or all of these mechanisms might enhance the motivational power of tangible non-monetary incentives; there may also be additional mechanisms not proposed here. . We have also provided other evidence that suggests how a tangible non-cash incentive can lead to better performance than the market value of that incentive as a cash award (Colby & Jack, 1996; Gravalos & Jack, 1995; Jeffrey, 2004). Cash may not always be the best incentive even if economists and lay people believe it is.

Potential Drawbacks of Tangible Non-Cash Incentives.

As with the use of any extrinsic incentive, there are possible drawbacks to using tangible non-monetary incentives. If a firm switches from a cash incentive program to a non-cash incentive program there will be issues of loss aversion and other problems created by a contrast effect. Loss aversion causes the negative utility created by losing an item to be greater in absolute value than the positive utility associated with receiving that same item (Kahneman et al., 1979). In Kahneman and Tversky's words, "losses loom

larger than gains" (1979, p. 279). Some estimates put this loss aversion coefficient between 2 and 2.5 (Tversky & Kahneman, 1991). This means that if a firm takes away a cash incentive worth \$100, it would need to replace it with an award worth between \$200 and \$250 for the employees to be satisfied with the exchange. This would be difficult and probably not in the firm's best interests. Note that this disadvantage may not be unique to tangible non-monetary incentives, in the sense that replacing this type of incentive with cash may induce loss aversion as well. A problem unique to tangible non-monetary incentives is that they may be compared to the previous cash incentive, causing the award to be evaluated in a more cognitive and less emotional manner, eliminating any benefit gained through the evaluation mode. The implication here is that firms should only utilize tangible non-monetary incentives as a new incentive scheme rather than a replacement.

The uncertain value of tangible non-monetary incentives could make them less effective if employees do not trust the firm. For example, employees may think that the firm is just trying to save money by somehow cheating workers. This would have a negative effect on the motivational power of the incentive and negative long term consequences for the employees' relationship with the firm (Guzzo, 1979). If the relationship with the firm is somewhat negative to begin with, an employee may attribute the firm's actions to a greed motivation. If the relationship is good, the employee is more likely to think the firm is doing something nice for them. Therefore, it is critical to understand the nature of the employment relationship prior to implementing a tangible non-monetary incentive program.

There are also possible problems if the actual consumption utility of the award varies greatly from the predicted utility of the award. For example, the employee may have been looking forward to receiving a home entertainment system, but then be disappointed when they actually use it. They may feel that they worked too hard in exchange for the prize they actually earned. If the employee is disappointed over the prize received, it may reduce the effort exerted in pursuit of future tangible non-monetary incentives. It could also feasibly change the employee's perception of the firm and the firm's motives. Research on cognitive dissonance suggests however that this may not be a major problem. If the employee believes that the value of the award is high, then they will be motivated to enjoy it as much as they had predicted (Bem, 1967; Festinger, 1958; Quattrone, 1985).

Directions for Future Research

Perhaps the most important research that needs to be done is to confirm the contribution of each of the hypothesized mediators discussed earlier in the paper. The importance of each of the proposed mediators of justifiability, evaluability, separability, and social reinforcement should be understood. It may also be the case that there are other mechanisms through which tangible non-monetary incentives increase work performance; future research should attempt to find these mediators if they exist. Tangible non-monetary incentives may also have different levels of efficacy across different tasks, and with different types of employees. Finally, there may be long term benefits associated with the use of tangible non-monetary incentives.

Research has shown that cash rewards tend to crowd out the intrinsic motivation necessary to perform creative work if they are seen as trying to control behavior

(Amabile, 1998; Amabile et al., 1986; Collins et al., 1999). Using tangible non-monetary awards may diminish this problem, particularly if they are seen as reinforcing behavior rather than trying to control it (Amabile, 1998). As another example, employees may stay at a task requiring persistence for a longer time due to the natural vividness of tangible non-monetary incentives.

It may also be the case that non-cash rewards are more effective with certain types of employees. Those employees who place high personal relevance on cash might not respond well to non-monetary incentives (Mitchell & Mickel, 1999). There may also be financial boundary conditions associated with the effectiveness of non-monetary incentives. If an award were too large a part of an employee's salary, the option value of cash would become more salient. While a person making an annual of income of \$30,000 might like a \$5,000 trip to the Bahamas; he or she might realize that if they were to go to a firm offering cash bonuses, they could earn more money to better provide for basic necessities. At much higher levels of salary however these basic needs become satisfied, making the use of expensive tangible non-monetary incentives more appropriate. The key implementation issue is that incentive awards should be scaled to the wages of the target employees.

Finally, the proposed short-term mediators will certainly vary in their strength across different national and organizational cultures. For example, collectivist cultures might be more likely to have prohibitions regarding the discussion of individual performance. More collectivist cultures will also be more concerned about the social utility of awards. With an increasingly diverse workforce and large multi-national

companies operating across national borders, it will be essential to address these cross-cultural questions in future research.

SUMMARY AND CONCLUSIONS

While a substantial amount of money is spent on tangible non-monetary incentives, it is only a small percentage of the total spent on employee compensation. We don't mean to suggest that cash incentives have no place in an organization; rather we suggest that given the theory of this paper, firms may be underutilizing this type of incentive. Psychological evaluation processes can raise the perceived value of an earned award, the perceived value of earning the award, and even the instantaneous decision to apply effort in pursuit of the award. This paper has also discussed implementation methods that will better inform the use of this type of incentive as well as how the motivational power of cash incentives might be improved through clever implementation.

Each psychological process that leads to the increased motivational power of tangible non-monetary incentives is both cognitive and emotional. This idea is consistent with research showing that both of these seemingly different processes can work together in judgment and decision making (Finucane, Peters, & Slovic, In Press; Mano, 1994). Justifiability is cognitive in the sense that people must consider the difficulty they would have justifying the purchase of a hedonic tangible non-monetary incentive. However, the sources of these justifiability concerns are more affective in nature. The utility gained from social interactions is cognitive in the sense that employees must think about using the prize earned to discuss good performance, but the utility received from others knowing of your performance is decidedly affective. An emotional rather than cognitive

evaluation will tend to enhance the perceived value of a tangible non-monetary incentive but the actual evaluation process where this feeling is converted into value is cognitive.

There has been much work on whether or not to use extrinsic incentives for employees but relatively little on what type of extrinsic incentive should be used; cash or non-cash. Work in this area can determine the type of incentive to be used, the circumstances under which they should be used, with which type of employees they will be most effective, and how these incentive systems should be implemented.

Understanding how tangible non-monetary incentives increase employee motivation has the potential to greatly improve the effectiveness of all incentive programs.

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