

# **Time Versus Money: What Are They Worth?**

Jennifer L. Pearson\*

[May 2009]

\* Jennifer Pearson is an undergraduate student in the College of Business Administration Honors Program at California State University, Long Beach, CA 90840. This manuscript serves to fulfill her Honors Thesis requirement. Address correspondence to Jennifer Pearson: [jennipear2@yahoo.com](mailto:jennipear2@yahoo.com).

## **ACKNOWLEDGEMENTS**

First and foremost, I would like to thank Dr. Pamela Miles Homer. Not only is she the Director of the CBA Honors Program, but she has also been my professor and advisor throughout this entire process. By offering her patience and expertise, she has assisted me in every step of the study. I will be forever grateful for the knowledge she has shared with me, as well as the encouragement, motivation, and advice she has provided me.

I would also like to express my gratitude to the professors that allowed me to take time out of their class to use their students in order to conduct my research: Ingrid Martin, Patrick Shield, and Farhana Siddiqi.

Finally, I would like to thank my family and friends for assisting me throughout this process. Whether it was through their motivation and encouragement, or giving of their time to help me in any way needed, their support did not go unnoticed.

**TIME VERSUS MONEY: WHAT ARE THEY WORTH?****ABSTRACT**

In both academic research and mass media alike, a continual debate exists as to whether a person values time more than money, or money more than time. This study seeks to offer insight and a better understanding of this topic. An experimental design uses scenarios posing different resources (time or money) for tasks with varying levels of enjoyment to test the research hypotheses. In addition, the moderating effects of individual difference characteristics (i.e., frugality, materialism, and personality traits) are explored. Findings indicate that there is a general consensus for individuals valuing time over money. Under a non-enjoyable setting, time was of more value, whereas there was little difference between money and time valuations under an enjoyable setting. Tests of moderation of the individual difference characteristics were largely unsupported, but analyses show some evidence that individuals high in frugality value their time over their money, as do those measuring high in materialism and extroversion.

## INTRODUCTION

“Being rich is having money; being wealthy is having time” (Stephen Swid, Chairman and CEO of SESAC, Inc.). This attitude coincides with Benjamin Franklin’s famous quote that “Time is money.” As indicated by Swid's statement, one cannot truly be wealthy if their entire life is spent in the office, devoting all of their time to working, and making money. If you have no free time, what is there to do with your large sums of money? As rich as you may be, what is it worth if you have no time for friends, family, or even for yourself?

Time and money are both mediums of exchange, but quite often they can only be exchanged in return for the other. A person may give a designated amount of time in return for a sum of money, or a person may pay a higher price for a convenience good in order to save time. It has become clear that typically individuals do not value their time and money in the same way, even if perhaps they should. People are much more willing to waste an hour of their time on something meaningless than they are willing to waste their money on something meaningless (Okada and Hoch 2004). Time and money are similar in the sense that many people feel that they never have enough of either, always wanting more time to get done what needs to be finished, always wanting more money to buy more material goods.

The current study expands on a prior endeavor by Okada and Hoch (2004) that explores the valuation of time versus money. The authors show that the value of time is ambiguous, justifying a different pattern of spending than money. Money can be given a designated value, indicated by what it may cost a person to pay a month’s rent, utility bills, other necessary items, as well as additional luxury items. However, this is not typically the case when valuing time. What is the value of an hour of time? Can it be equivocated to an individual’s hourly wage rate at their job? Is it worth more in one situation compared to another? The primary objective here is to enhance

understanding about how individuals value time versus money. An experimental design uses scenarios posing different resources (time or money) for tasks with varying levels of enjoyment to test the research hypotheses. In addition, the moderating effects of individual difference characteristics (i.e., frugality, materialism, and personality traits) are explored.

### **BACKGROUND**

Okada and Hoch (2004) sought an explanation that could account for the differences between how people spend their time in comparison to how they spend their money. As noted above, they conclude that the value of time is ambiguous and that people tend to be more creative when they attempt to rationalize time expenditures. Whereas it is relatively clear what a dollar is worth, or for that matter what one million dollars are worth, the “value” of one’s time is less determinable. The authors question just how valuable a set amount of time is worth to a person, whether it is based on a person’s wages at their job, opportunity costs for which time could otherwise be used, or by any other valid measure. Respondents were placed in situations where they used either money or time to obtain a given reward. For some subjects, the resulting reward had a positive outcome, whereas others faced situations resulting in a negative outcome. Results showed that respondents had the greatest amount of happiness when they had a positive outcome and had paid with money, followed by a positive outcome after giving time. However, the results were reverse in the case of a negative outcome. Respondents were less dissatisfied with a negative outcome when they had given their time and much more dissatisfied when they had given their money and achieved a negative outcome for their reward. Similarly, I expect that reactions to identical final outcomes will vary depending on perceived enjoyment of the experience (task) being rewarded: i.e.:

H1A: Individuals will react more favorably to a reward if they perceive that their experience towards reaching that reward will be enjoyable.

H1B: Individuals will react less favorably to a reward if they perceive that their experience towards reaching that reward will not be enjoyable.

### ***Mental Accounting and Sunk Costs***

When trying to differentiate an individual's valuation of time and money, factors such as mental accounting and sunk costs play a key role. These topics are issues that individuals deal with daily, but sometimes do so without even realizing it or giving it a second thought. Thaler (1980, 1999) proposed the idea of mental accounting to explain the results of an experimental study that presented alternative scenarios. In one situation, an individual bought a ticket in advance to an upcoming basketball game for \$40. In the other situation, the person received an identical ticket for free to attend the same game. Both treatment groups were told that on the day of the game, there was a major snowstorm and the roads are very bad. According to Thaler's (1980, 1999) perspective of mental accounting, the person who bought their ticket for \$40 is more likely to go out in the snowstorm in order to make it to the game than the person with the free ticket. That is, the person who spent \$40 for his/her ticket in effect needs \$40 "worth" of benefit out of the basketball game, whereas the person with the free ticket does not necessarily need any benefit to "get what he/she paid for."

In economics, a sunk cost is a cost that has already been incurred and cannot be reversed. Arkes and Blumer (1985) examined the sunk-cost effect and defined it as being the "greater tendency to continue an endeavor once an investment in money, effort, or time has been made." However, this position contradicts Thaler's (1980) theoretical argument of mental accounting. If sunk costs are assessed in the above situation, past costs and benefits should be irrelevant to current decisions. That is, whether a person chooses to go or not go to the basketball game is unaffected by the method by which their ticket was received because the cost has already been incurred and is therefore forgotten and irrelevant to the situation at hand (i.e., the snow storm).

More recently, Soman (2001) combined these ideas of mental accounting and sunk costs to investigate whether past time investments affect current decisions. Experiments presented situations where sunk costs had already been incurred, in the forms of both time and money. Results show that the sunk-cost effect is not necessarily valid for past investments of time, but continues to remain sound for past investments of money. When there was a sunk cost of money, people were hesitant to change their course of action due to the money that they would “lose.” However, if their sunk cost was in the form of time, they were more willing to make a change of plans if it would result in a more favorable result, despite the amount of time lost. This demonstrates that people may not mentally account for time in the same manner that they account for money. This finding also coincides with the predictions of Okada and Hoch (2004) that the difference between positive and negative outcomes is greater when paying with money than when paying with time.

In many cases, a person will choose to forfeit money income in order to obtain additional utility, also known as psychic income. Nadya O'Connell (2001) reports the turnover statistic that over a third of the workforce leaves within two years. She also references a study from the Department of Labor in which 84 percent of respondents would trade future income for free time, nearly half of whom would pass on a 10 percent raise in order to have more free time. The theory behind psychic income emphasizes the importance of liking your job. One who enjoys their job is much more willing to show up for work every day, perhaps even at a lower pay than one who has a high salary but does not enjoy what they do. When someone enjoys the task that they must do, they will not place as strict of a valuation on the reward that they receive, whether they have given of their time or money. Based on the above arguments, I propose that:

- H2: The valuations of time and money will vary for non-enjoyable environments. For enjoyable environments, time and money valuations will be comparable (not differ).

### *Ambiguity of Time*

A key issue that has received continued empirical attention is determining the value of time, specifically in relation to what it is worth in monetary terms. Money is a resource that is easy to place a “value” on, comparing it to the cost of material objects available for purchase. However, time is not readily exchangeable; once it is used up, it is gone forever (Okada and Hoch 2004).

We also do not account for time in the same way that we do for money. Soman (2001) notes that while businesses keep accounts of monetary investments, this is not the case for time investments. In economics, money is treated as a factor of production, whereas time is not. Individuals act in the same manner, thinking of transactions in monetary terms, disregarding time.

Another perspective related to time valuation is Hsee’s (1996) concept of elastic justification that refers to situations where different justifiable factors “have different values and the relative weights among those factors are ambiguous so that one can interpret the aggregate effect of those factors in multiple ways” (Hsee 1996, p. 122). Hsee goes on to say that people attempt to seek justifications for their decisions after they have already occurred. As a result, they may more easily “accept” a situation gone awry.

Kunda (1990) applies motivated reasoning to the issue, stating that people are more likely to arrive at conclusions that they want to arrive at (that make them feel good). Therefore, the ambiguity in the value of time allows people to be more creative in their reasoning behind the situation. Testing this argument, Okada and Hoch (2004) asked respondents to place a monetary value on their time, and compared the impact of receiving a positive versus negative experience in the end. Results show that people valued their time as being much more valuable when they had a positive outcome as opposed to a negative outcome, feeling that they were able to “justify”

their reason for having a bad experience with comments such as “It cost me no money, just time” or “At least I didn’t pay money.” Therefore, I test that:

- H3: The perceived monetary valuation of time for a non-enjoyable task is greater than the perceived valuation of time for an enjoyable task.

### ***Moderating Variables***

The effects of *resources used* (time versus money) and *task affect* (enjoyable versus not enjoyable) proposed above in H1-H3 may be impacted by moderating factors, e.g., individual difference characteristics. It is natural to expect that some personal tendencies and traits may play a critical role in terms of how individuals value their time and money, and to what significance they place on each in their daily lives. This study measures three such factors: frugality, materialism, and the personality construct of introversion/extroversion.

***Frugality.*** Frugality is shown in a person's spending habits and daily lifestyle. Lastovicka, Bettencourt, Hughner, and Kuntze (1999) describe it as being a characteristic in which a person is more resourceful with what they already have and more disciplined in terms of what they allow themselves to buy. Through qualitative research, they find that a frugal individual shows the following traits and characteristics: disciplined in their spending of money and less impulsive in their buying, resourceful in using and reusing current possessions so as not to acquire more or pay more, and they also feel more independent than average (p. 87). Their study shows that a frugal individual is less susceptible to interpersonal influence, less materialistic, less compulsive in buying, and more price and value conscious (Lastovicka et al. 1999). This evidence suggests that *resources used* and *frugality* will interact:

- H4: An individual who is more frugal will value money greater than they value time. This will lead to greater differences between time and money valuations for frugal individuals (across enjoyable and non-enjoyable task situations) compared to less frugal persons.

**Materialism.** Next, we look at the measure of materialism in terms of how it influences a person's interpretation of the value of time and money. Richins and Dawson (1992) consider materialism to be “a value that guides people’s choices and conduct in a variety of situations, including, but not limited to, consumption arenas” (p. 307). People who are considered to be materialistic are often seen as obsessed with the notion of achieving happiness through consumption. From an individual level, research has shown that materialism is inversely related to self-esteem, well-being, quality of life, and satisfaction with life in general (Richins et al., 1992). Additionally, we see that the strong desire to achieve monetary success, a desire much stronger than that for any other non-monetary goals, is associated with negative outcomes (Kasser and Ryan, 1993).

In addition, Fitzmaurice and Comegys (2003) find a positive correlation between materialism and the amount of time spent shopping, as well as a positive correlation between materialism and the amount of spending. Materialistic individuals may feel that having money is the key to happiness and life satisfaction, judging themselves and others based on their possessions. Therefore, they buy more things, and are more willing to buy things than someone who is less materialistic. By being more willing to spend and use their money, rather than save it, a materialist may have a slightly lower value placed on money itself, placing more value on possessions and things that are bought. This suggests that:

H5: An individual who is more materialistic will be more willing to spend money for a reward, as opposed to using time to obtain the same reward.

**Personality.** Finally, the concept of introversion/extroversion may influence how an individual makes their time versus money decisions. To test his biologically based theory of introversion-extroversion, Eysenck (1967) measured cortical inhibition and excitation within the ascending reticular activating system (ARAS). According to the Dictionary of Psychology, the

ARAS is defined as being responsible for wakefulness, attention, and concentration within the body through changes in the physiological arousal or activation of the cerebral cortex. Eysenck showed that introverts have higher levels of activity in the ARAS and are therefore more highly aroused than extroverts under similar conditions of stimulation. Furthermore, due to this over-aroused condition, introverts will typically desire social situations that are non-arousing to keep from increasing their stimulation levels. On the other hand, extroverts have a lower level of internal arousal and therefore seek to increase their external stimulation (Eysenck 1967).

Consistent with these findings, a study by Ashton, Lee, and Paunonen (2002) finds empirical evidence that the central feature of extroversion is the tendency to engage and enjoy social attention.

The Eysenck Personality Questionnaire–Revised (Eysenck and Eysenck 1992) is a 48-item personality questionnaire that measures the three central "supertraits" described as extroversion (versus introversion), neuroticism, and psychoticism. Sato (2005) later developed a briefer, yet still reliable, version to measure a person's level of extroversion (or introversion). These scales resemble the big-five factors (surgency (or extroversion), agreeableness, conscientiousness (or dependability), emotional stability (versus neuroticism), and intellect (or culture)) examined by Lewis Goldberg (1992). The current study measures the extroversion/introversion supertrait and the first factor of the big-five, surgency, to further explore if this individual difference tendency impacts decisions about the relative value of time versus money. As Sato describes, "extroverted individuals naturally have a lower arousal level than do introverts, which causes extroverted individuals to seek stimulation to raise their arousal levels" (p. 545). This follows in accordance with the research by Ashton et al. (2002) that an extrovert enjoys social attention and will tend to seek out social situations. As a result, an extrovert will typically want to do as much as they can

with their free time, not wanting to waste any time and always looking for something to do, which leads to the proposition that:

H6: An individual high in extroversion will typically value time over money.

Sato (2005) continues to say, "The naturally high arousal level of introverted individuals causes them to avoid stimulation as much as possible. This is why introverts tend to like quiet activities whereas extroverts tend to like stimulating activities" (p. 545). Thus, an introvert may be more likely to take extra time to shop around for a good at a cheaper price, because it is something that does not require too much stimulation, specifically stimulation from others.

Therefore:

H7: An individual high in introversion will tend to show more frugal tendencies. This type of individual will therefore typically value money over time.

## **METHODOLOGY**

### ***Subjects and Procedure***

The sample consists of 175 undergraduate business administration students from California State University, Long Beach (54.9% female, 42.9% male, 2.2% undisclosed). Participants were first told that "this is a study about attitudes toward performing a specific task." Each respondent was asked to read a scenario that included the experimental manipulations. Afterwards, all were instructed to complete the questionnaire at their own pace. The first sets of items included measures of likelihood to accept the given task, as well as overall impressions of the task experience, the work put in, and the reward. These were followed by the frugality, materialism, and personality measurement instruments. The questionnaire concluded with manipulation checks as well as final demographic questions (age, gender, ethnic background, major). Each

subject was given a debriefing statement at the conclusion of the experiment. All subjects were randomly assigned to treatments and the administrator was blind to those assignments.

### ***Stimuli Development***

Four scenarios were created (manipulations embedded within each) in the 2 (*resources used*: time/money) x 2 (*task affect*: enjoyable/non-enjoyable) factorial design. Subjects were placed in a hypothetical situation where they gave of their time (paid or unpaid) in return for a final reward. The final reward of a “night on the town” is the same in each scenario. The scenarios were designed to create two levels of each of the manipulated factors: i.e., *resources used* (time/money) and *task affect* (enjoyable/non-enjoyable). Each scenario is one paragraph long, all versions are of equal length, and all provide an equal amount of information. [See the Appendix for complete scenarios.]

The first manipulation is *resources used*. Half of the scenarios describe their prior task as being paid: “For four hours of work, you get paid \$50. You used the \$50 you made from this job for a “night on the town” with a friend. You have dinner at a downtown restaurant, followed by a movie. The food and service at dinner was good and you enjoyed the movie.” The other half of the scenarios present a situation in which money is not received in exchange for the time given, but the same reward is still received. It reads: “In return, you get a “night on the town with a friend. You have dinner at a downtown restaurant, followed by a movie. The food and service at dinner was good and you enjoyed the movie.”

The second manipulation is the perceived level of enjoyment of the task at hand (*task affect*). In half of the situations, the task is enjoyable, working at a local park with children. Specifically, subjects read that they “coach young children how to play various sports. The children are kind and well behaved, and you have a good time.” The other situations present a non-enjoyable task,

cleaning toilets. In these scenarios, subjects read that they “work at a local school cleaning toilets. The toilets had not been cleaned in a few weeks and it was not an enjoyable task.”

### ***Task Enjoyment Pretest***

A pretest was conducted to confirm that students perceive the potential tasks as enjoyable or non-enjoyable. Thirty undergraduate business administration students (from the same population as the main study sample) were given a list of 25 distinct tasks. These tasks ranged from household duties such as doing laundry to yard work activities such as mowing the lawn to charitable activities such as planting trees at a local park. The students were asked to rate the level of enjoyment of each task on a scale from 1 to 9. It was determined that the least enjoyable of the given tasks was cleaning toilets, and the most enjoyable was coaching a youth sports team. Therefore, these tasks were used in the main study.

### ***Measures***

Multiple measures were designed to capture each of the key dependent and covariate constructs: likelihood to accept the task, attitudes towards the task (used as a manipulation check), attitudes towards the reward, materialism, frugality, and extroversion/introversion. Unless otherwise noted, all measures utilized a 9-point scale. All constructs are reliable: likelihood to accept/not accept the given task in return for the reward offered (3 items;  $\alpha = .94$ ); overall attitudes towards the experience (“negative/positive”, “unfavorable/favorable”, “dislike/like a lot”;  $\alpha = .97$ ); attitudes towards the work (“negative/positive”, “unfavorable/favorable”, “dislike/like a lot”, “unpleasant/pleasant”, “bad/good”;  $\alpha = .99$ ); and overall impressions of the reward (“negative/positive”, “unfavorable/favorable”, “dislike/like a lot”, “unpleasant/pleasant”, “bad/good”;  $\alpha = .97$ ). Finally, subjects were asked how much they felt

their four hours of time under the stated scenario was worth and asked to fill in a dollar amount in the line provided.

In order to get a better understanding of how various personal characteristics may impact reactions to the scenarios, subjects completed several batteries assessing personality traits/values. The first measure of personality studied is the individual's level of frugality. This set of items is taken from the frugality scale developed by Lastovicka et al. (1999), designed to assess the degree to which the subject is considered to be a frugal or "thrifty" buyer. It includes statements such as "I believe in being careful in how I spend my money" and "There are things I can resist buying today so I can save for tomorrow" (8 items;  $\alpha = .79$ ). The materialism value scale developed by Richins (2004) is used to determine the value a person places on possessions. Questions included: "The things I own say a lot about how well I'm doing in life" and "Buying things gives me a lot of pleasure" (9 items;  $\alpha = .85$ ). The next construct assesses the degree to which a person can be considered an introvert or an extrovert. The first instrument is the short scale version of the Eysenck Personality Questionnaire (simplified and revised by Sato (2005)). In the Eysenck/Sato battery, factors were presented in a question format. For the sake of the current study, each question is presented as a statement. However, only a minimal number of words were changed and the attributes remained the same. For example, "Are you a talkative person?" became "I am a talkative person" to maintain consistency in using a 9-point agree/disagree scale. This set included questions such as, "I can usually let myself go and enjoy myself at a lively party", or reverse-scaled questions like "I am mostly quiet when I am around other people" (12 items;  $\alpha = .93$ ). The trait instrument used the big-five model developed by Goldberg (1992), focusing on the factor of surgency. These comparisons of adjectives include: silent/talkative, passive/active, and unsociable/sociable (10 items;  $\alpha = .93$ ).

## RESULTS

### *Manipulation Check and Covariates*

As desired, overall attitudes towards the work were more favorable for those exposed to the *enjoyable* task environment ( $F(1,159)=561.81, p<.001, M=7.36$ ) than the *non-enjoyable* task ( $M= 2.27$ ). In order to account for individual differences, the frugality, materialism, and introversion/extroversion scales were incorporated as covariates in all tests of H1-H3.

### *H1-H3*

In order to test H1-H3, the effects of the two experimental manipulations on the three dependent construct scales are analyzed via ANCOVA: intent to accept the task; attitude toward the task experience; and attitude toward the reward. In each of the tests, the three moderating variables (frugality, materialism, and introversion/extroversion) are included as covariates. [See Table 1 for summary of treatment means.]

[Insert Table 1 about here.]

The first set of hypotheses (H1A and H1B) tests the effects of the likelihood to accept the task based on the level of enjoyment (*task affect*) in reaching the reward. The level of enjoyment does have a noteworthy effect on likelihood to accept the task ( $F(1,140)=89.60, p=.000$ ). Respondents with an enjoyable task ( $M=6.69$ ) have a greater acceptance rate than respondents with a non-enjoyable task ( $M=3.47$ ). Therefore, H1A and H1B are supported as respondents react more (less) favorably to a reward if they perceive that their experience towards reaching that reward will be enjoyable (not enjoyable).

H2 tests the differences between the value of time and money in a non-enjoyable task environment versus an enjoyable task environment: i.e., that, in a non-enjoyable environment, time and money are valued differently, but in an enjoyable environment, there is no such difference.

ANCOVA analyses for *attitude toward the experience* identify main effects for *task affect*

( $F(1,152)=236.69, p=.000$ ) and *resources used* ( $F(1,152)=3.65, p=.058$ ), along with a marginal interaction between *task affect* and *resources* ( $F(1,152)=3.06, p<.10$ ). Examination of treatment means indicates that in a non-enjoyable environment, respondents value their time ( $M=4.23$ ) over their money ( $M=3.37$ ). In an enjoyable environment, however, differences between time ( $M=7.43$ ) and money ( $M=7.40$ ) are insignificant. Analysis of *attitudes towards the reward* identified main effects for *task affect* ( $F(1,151)=17.81, p=.000$ ) and *resources used* ( $F(1,151)=5.72, p=.018$ ), but no statistically significant interaction between *task affect* and *resources* ( $F(1,151)=0.82, ns$ ). Main effects indicate that the reward is rated more positively when the task is enjoyable ( $M=7.32$ ) versus non-enjoyable ( $M=6.15$ ), and when the resources used involve time ( $M=7.06$ ) compared to money ( $M=6.40$ ). Examination of individual cell means indicate directional support for H2: i.e., in a non-enjoyable environment, respondents value their time ( $M=6.61$ ) over their money ( $M=5.69$ ). In an enjoyable environment, however, differences between time ( $M=7.53$ ) and money ( $M=7.12$ ) are greatly reduced. *Task affect* has the greatest impact on *acceptance likelihood* relative to *resources used* and the interaction term. Subjects are more likely to accept the task when the task is enjoyable versus non-enjoyable ( $F(1,140)=89.60, p=.000, Ms=6.69$  vs.  $3.47$ ). As hypothesized, planned comparisons of the treatment means for the interaction term ( $F(1,140)=1.82, ns$ ) show a greater difference between time and money when the task is non-enjoyable ( $M=4.01$  for time vs.  $M=2.93$  for money) compared to the enjoyable task ( $M=6.77$  for time vs.  $M=6.62$  for money).

Analysis on the free-response question indicating the value a person places on four hours of time in the given situation is consistent with H3. Analyses for the monetary *value of time* indicate statistically significant results ( $F(1,79)=10.66, p=0.02$ ) for *task affect*. Treatment cell means reveal that in an enjoyable environment, respondents value four hours of their time ( $M=66.83$ ) less than they value four hours of their time in a non-enjoyable environment ( $M=100.17$ ).

**H4-H7**

The remaining hypotheses measure the effects of moderating variables of frugality, materialism, and introversion/extroversion and how they impact a person's valuation of time and money. As noted above, these variables show no great impact as covariates. For a more powerful test of H4-H7, median split variables were created for each of the three individual difference characteristics. These were then included as a third fixed factor in a series of ANOVA analyses.

**Frugality.** H4 proposes that *resources used* interacts with *frugality* such that time and money are valued differently by frugal individuals. Data show that ANOVA results for likelihood to accept the task are insignificant ( $F(1,139)=2.31$ , *ns*, for the *frugality* x *resources* interaction) and cell means are not supportive of H4 (see Table 2A). More frugal individuals value time ( $M=5.69$ ) more than money ( $M=4.58$ ), whereas less frugal folks rate them equally ( $M_s=4.91$  vs. 4.84). Results for overall attitudes towards the reward are not consistent with H4 ( $F(1,150)=0.07$ , *ns*). The differences between time and money valuation is comparable (not significant) for frugal ( $M_s=7.39$  vs. 6.61) and less frugal individuals ( $M_s=6.65$  vs. 6.03). Similarly, results for overall attitudes towards the experience do not support H4 ( $F(1,152)=0.18$ , *ns*). The differences between time and money valuation are similar (not significantly different) for frugal ( $M_s=6.13$  vs. 5.65) and less frugal individuals ( $M_s=5.41$  vs. 5.14).

[Insert Table 2A about here.]

**Materialism.** H5 proposes that *resources used* interacts with *materialism* such that time and money are valued differently by individuals with materialistic qualities. ANOVA results for likelihood to accept the task are insignificant ( $F(1,141)=0.59$ , *ns*, for the *materialism* x *resources* term). However, cell means offer directional support for H5 (see Table 2B): i.e., more materialistic subjects value time ( $M=5.36$ ) more than money ( $M=5.04$ ). Less materialistic individuals show similar results, indicating that they too value time ( $M=5.34$ ) over money ( $M=4.51$ ). The *materialism* x *resources* interaction for attitudes towards the reward is marginally significant ( $F(1,152)=2.64$ ,

$p=0.106$ ). Materialistic individuals are again shown to value their time ( $M=7.01$ ) over their money ( $M=6.70$ ), supporting H5. Those expressing low levels of materialistic characteristics have a stronger tendency to value time ( $M=7.23$ ) over money ( $M=6.02$ ). Findings for overall attitudes towards the experience are insignificant ( $F(1,155)=0.31, ns$ ). The differences between time and money valuation are comparable for materialistic ( $M_s=5.99$  vs.  $5.43$ ) and less materialistic individuals ( $M_s=5.71$  vs.  $5.41$ ).

[Insert Table 2B about here.]

**Extroversion/Introversion.** H6 and H7 propose that *resources used* interact with *extroversion/introversion* such that time and money are valued differently by extroverts and introverts. Although ANOVA results for likelihood to accept the task are insignificant ( $F(1,140)=0.05, ns$ ), cell means show support for H6 (see Table 2C): more extroverted people value time ( $M=5.42$ ) more than money ( $M=4.81$ ). Similarly, more introverted individuals value time ( $M=5.25$ ) more than money ( $M=4.81$ ). Analyses for overall attitudes towards the reward are also insignificant ( $F(1,152)=0.01, ns$ ). Cell means again show directional support that time valuation ( $M=7.25$ ) is greater than that of money ( $M=6.54$ ) for more extroverted individuals (H6), but the differences between time and money valuation are similar for introverts ( $M_s=6.96$  vs.  $6.19$ ). The interaction effect for overall attitudes towards the experience is insignificant as well ( $F(1,153)=0.24, ns$ ). Once again, however, cell means offer directional support of H6, showing that time ( $M=5.81$ ) is of greater value than money ( $M=5.47$ ) for extroverts. Similarly, for individuals high in introversion, time ( $M=5.90$ ) is valued more than money ( $M=5.34$ ) (H7).

[Insert Table 2C about here.]

Another interesting observation emerges for overall work attitudes: there is a significant interaction between *extroversion/introversion* and *task affect* ( $F(1,154)=5.21, p=0.024$ ). Cell means show a substantial difference for extroverts' overall work attitudes resulting from whether they were placed in an enjoyable task setting ( $M=7.57$ ) or a non-enjoyable task setting ( $M=2.01$ ). Likewise, for

introverted individuals, there is a large difference in their attitudes toward the work under an enjoyable environment ( $M=7.11$ ) as compared to a non-enjoyable environment ( $M=2.50$ ).

Additionally, there is also a marginal three-way interaction between *task affect*, *resources used*, and *extroversion/introversion* ( $F(1,154)=2.89, p<.10$ ). Examination of cell means support that for extroverts partaking in an enjoyable task, time ( $M=7.84$ ) is valued more than money ( $M=7.31$ ). Extroverted individuals under a non-enjoyable task also value their time ( $M=2.27$ ) over their money ( $M=1.74$ ). In an enjoyable task, time ( $M=6.81$ ) is valued less by introverts than money ( $M=7.40$ ), giving some support for H7. However, for introverts in a non-enjoyable task, time ( $M=2.93$ ) is valued more than money ( $M=2.08$ ). Although this contradicts H7 in the sense that introverts appear to value their time over their money, there is some data that backs H7. Comparing data from H4 and H7, both frugal and introverted individuals show tendencies of valuing their time over their money. Therefore, it appears that individuals high in introversion will also typically be more frugal.

### ***Results Summary***

In summary, results show first that there is clear evidence supporting both H1A and H1B, meaning that respondents are more likely to accept an enjoyable task as compared to a non-enjoyable task, when giving both time and money. As a result of this, subjects followed through by viewing their reward more positively when they were under more favorable conditions for the task at hand as compared to those who were not as thrilled about the reward that they received if they were under less favorable conditions, even though the reward itself was the same in each scenario. H2 receives support as well, indicating clear evidence that time is, in fact, valued over money in a non-enjoyable environment. Under an enjoyable environment, there is little difference in the valuations of time versus money. We look at the value a person places on four hours of their time under H3. This hypothesis receives notable support in that the value of time is greater in a non-enjoyable environment as compared to an enjoyable environment.

Support for hypotheses involving the moderating variables is not nearly as strong. All ANOVA analyses testing H4 were insignificant. Cell means analyses show data contrary to H4, indicating that more frugal individuals typically value time over money, contrary to the hypothesis proposed. Although ANOVA main and interaction effects are once again insignificant for H5, planned comparisons are supportive. These data show that highly materialistic individuals place a higher value on their time as compared to the value they place on their money. ANOVA effects are once again insignificant for analysis of extroversion/introversion (H6 and H7). Directional support is visible for H6 when looking at cell means: i.e., highly extroverted individuals place a higher value on time as compared to money (H6) under enjoyable and non-enjoyable task environments. However, no such support for H7 emerges. Cell means comparisons show that introverted individuals also value their time over their money, contrary to predictions. There is slight support for H7 under an enjoyable task, in which subjects valued their money over their time, but this was not the case for a non-enjoyable task. In addition, there was partial support for H7 examining the relationship between introversion and frugality. Although both hypotheses were incorrect in terms of time and money valuation, both frugal and introverted individuals value time over money, suggesting that an individual high in introversion will show frugal tendencies.

## **DISCUSSION**

Economics is the study of how society allocates its scarce resources among its unlimited wants and needs. We, as individuals, also face the problem of scarcity of our resources, specifically our time and money. It is almost an everyday occurrence to hear someone protest that they do not have enough time in the day to get done everything they want and need to do, or that they don't have enough money to buy everything that they want and need. It is highly unlikely that most of us will ever face a time where we have unlimited amounts of time or unlimited amounts of money. More often, there is a trade-off between these two currencies. Therefore, we must place a value on each of

these resources in order to allocate which of our wants and needs will be satisfied, as well as how much and which of our resources (time or money) we will use to satisfy those wants and needs.

The purpose of this study is to provide a deeper look in to the ongoing debate as to whether we, as individuals, value our time more than our money, or vice versa. Academic research on exchange is dominantly focused on money-based transactions. Recently, Okada and Hoch (2004) examined the valuation of time as currency, concluding that its ambiguous nature tends to lead to more creative rationalization processes. I sought to further expand that literature and additionally to look at how specific individual difference characteristics/traits affect a person's valuations of these resources. Analyses tested the impact of (1) whether one was given an enjoyable or non-enjoyable task to accomplish to obtain a reward, (2) whether the reward was obtained by giving money or only time, and (3) personal characteristics, on respondents' valuations of time versus money. It is easy to place a value on money, based on what it can buy in terms of possessions, material things, or an experience received (such as entertainment and services). However, the value of time is more ambiguous (Okada and Hoch 2004). Whereas some claim to have found a mathematical solution to the problem, it is nearly impossible for all to agree that any such formula is an adequate measure of time. For example, Lam and Small (2001) claim that an hour of time is simply worth \$22.87 based on their calculations of travel time. However, even if this was an agreed upon amount, it would inevitably differ year to year. Popular websites such as MSN Money (2009) and CNN Money (2004) claim to have equations that allow a user to calculate the value of their time, although there are inconsistencies between the sites. These formulas use variables including wage, tax rate, cost of living, and commuting expenses.

Tests of the first set of hypotheses (H1A and H1B) are encouraging. The rewards in each scenario are exactly the same. Not surprising and consistent with Okada and Hoch (2004), when the task to obtain this reward was enjoyable, in this case coaching young children on how to play various sports, the reward was received quite favorably. When the respondent was asked to do a non-enjoyable task, cleaning toilets at a local school, attitudes toward the reward fell significantly, as

indicated by the drastic decline in likelihood to accept the task. If a subject enjoys the “work” put in to obtain the reward, at least to an extent, it makes logical sense that they would be more willing to perform this task when compared to doing something that they may detest.

Analysis of H2 shows that the values between time and money vary quite drastically when respondents must perform a non-enjoyable task. When cleaning toilets, it is clear that one would rather give of their money than give of their time in order to obtain the prescribed reward. When performing a task in which one receives a non-monetary reward, one may carry through with the task with greater resistance. While completing the task, perhaps he/she is thinking of all the other more enjoyable things that they could be doing with their time. With this, it becomes harder and harder for the reward to be “worth it” due to the fact that the process to obtain this reward is so miserable. When giving time, individuals may not see the experience as a whole as being worthwhile, feeling the reward is not great enough for the work that must be expended. When receiving money, a person knows the exact monetary compensation they will receive. This makes the task more like a job, and thus it may be viewed differently compared to when a non-monetary reward is received. On the other hand, there are little differences in the valuations of time and money in an enjoyable environment. When performing the task, the scenario states that “you have a good time.” When a person undertakes an expected enjoyable task, they enjoy the task itself before a reward is received. Whether you receive money to use towards the reward, or receive the reward based on the donation of your time, it is simply an extra bonus to the fun that you already experienced. Such reasoning seems to explain why a person values time and money similarly in an enjoyable environment.

Support for H3 shows us that time is valued much higher in a non-enjoyable environment as compared to an enjoyable environment. The rationale for this is similar to that just described above. If you detest doing a task, it will take more to convince you to do the given task, or a larger reward, be it monetary or non-monetary, for you to feel that the task is worthwhile. Many may freely give of their time to do a task as enjoyable as coaching young children on how to play various sports.

Therefore, whether they receive money to obtain the reward, or simply receive the reward by giving their time, this comes in addition to the enjoyment that they already experienced.

Data did not support predictions that more frugal individuals value money over time. This was surprising, because a frugal individual is thought to be one constantly looking to save money and cut costs. It was assumed that one high in frugality would be willing to give of their time cutting coupons or looking for sales in order to save some money, therefore placing a higher value on money versus time. Perhaps frugal individuals value their time more based on the input of time it typically takes them to earn their money. This type of individual may feel that they worked hard for the money that they earned. Therefore, the little free time that they do have outside of their hard-working lives should be used wisely; it should not be “wasted” by simply using up four hours of time on something frivolous, or on something such as cleaning toilets. Another issue relates to the time that frugal individuals devote to saving money. It clearly takes time to be a frugal individual, taking on tasks such as looking at store ads to find the lowest price, or going through coupons to save a buck or two; perhaps this makes time “disappear” in a sense. Time is of the essence and even when you have free time, you want to use it wisely. In addition, research by Marmorstein, Grewal, and Fishe (1992) on the perceived enjoyment of price-comparison shopping offers insight. The authors show that consumers who enjoy shopping place a relatively lower opportunity cost on the activity. There is a chance that perhaps a frugal individual may enjoy shopping and therefore will not feel that they are "wasting" their time by looking around for the best prices.

Support for H5 shows that more materialistic individuals value their time over their money, being more willing to “pay” for a reward with money as opposed to time. Materialistic individuals place a high value on possessions, more so than money itself. Richins and Dawson (1992) report that some materialists believe "possession of things is the ultimate source of happiness in life" (p. 307). Often, this is to impress others to proclaim their high status based on their personal possessions. Most specifically, in a non-enjoyable task, a highly materialistic individual may fear the loss of status by

performing such a menial task. As noted by Eastman, Goldsmith, and Flynn (1999), materialists are motivated to acquire goods in order to signal both to themselves, others, and their surroundings of their attainment of status in society. Because status is important to these individuals, if others saw them doing something such as cleaning toilets at a local school, they may fear losing their reputation and having others think less of them. The data supports previous research on materialism and the value placed on money as well as the constant desire to “buy” things, in contrast to wanting to give of time in order to obtain these things. These individuals judge both themselves and others based on possessions, leaving them with a constant desire to buy more things in order to increase their levels of happiness as well as increase their status and reputation (Fitzmaurice and Comegys 2003).

Statistical support for H6 shows that, as hypothesized, an individual high in extroversion will tend to value their time over their money. These types of individuals seek social attention, wanting to fill any free time that they may have with some type of social interaction. Therefore, if they can give of money as opposed to giving time in order to obtain a reward, it is more desirable. The interaction between levels of *extroversion/introversion* and *task affect* show that in an enjoyable environment, respondents show a drastically higher overall work attitude as compared to a non-enjoyable environment. This provides further support for the notion that those high in extroversion enjoy social attention. The enjoyable task was coaching young children and therefore, interacting with them was an inherent part of the task. Extroverts particularly would find this enjoyable, especially compared to cleaning toilets, which typically lacks any form of social interaction.

Upon reviewing data for H7, there is little support backing the hypothesis that introverts value money over time. Most data shows that introverts value time over money, although there is indication that introverts value money over time in an enjoyable task environment. Previous research by Eysenck (1967) and Sato (2005) looked at levels of activity in the brain, implying that introverts seek to avoid any additional stimulation, enjoying quiet activities such as a night in at home. Therefore, introverts won't particularly want to go out and clean toilets or coach children, further stimulating

their brain. This will lead them to value their time more than their money. The specific tasks chosen for this study may account for seemingly inconsistent findings. Coaching young children requires much interaction with other people, something an introvert may often seek to avoid, and that element may have impacted the findings reported here.

### ***Limitations and Future Research***

An obvious limitation is the sample of respondents used for the study. College students taking business classes could very likely have different valuations of time and money compared to those with similar personality traits that are further along in their lives. Business students are often career-minded individuals, but typically have not already started their careers. Once they become a salaried employee, start a family, and make large purchases such as buying a house, it is very likely that their valuations of time and money in a similar scenario may change. Additionally, looking at differences between those in different careers could provide valuable results. For example, one may compare valuation processes for skilled workers in professions such as doctors or lawyers to unskilled workers in professions such as janitors or maids. A non-student sample may also produce a more diverse set of individuals in terms of dominant personality traits: e.g., student samples tend to lack sufficient variance in some trait measures.

Incorporating more diverse age and income groups could have interesting implications as well. The majority of, although not all, college undergraduate students are under the age of 30. Income and occupation aside, will a person's psychological beliefs be changed as they get older? Once one retires and exits the work force, does he/she alter their basic valuations of time or money? Do those with high paying jobs place a higher value on their money because they work so hard to get it, or do they place a higher value on their time because all of their time is spent trying to obtain more money and therefore they lack free time? And, how about the impact of ones' upbringing and family background? For example, family wealth may impact one's valuations of these resources.

Time and money are likely valued differently across cultures and religions. It is generally accepted that Americans have less free time as indicated by siestas in Latin countries and more paid vacation days in most European countries. With the extra leisure time these cultures receive, do they place a higher or lower value on their free time and their disposable income? Religions hold varying beliefs, many of which may affect an individual's personality as well as their valuations on time and money. Some religions may suggest, or even require, of giving an "offering" as a donation to the church, temple, etc. Additionally, many may give of their time to volunteer for religious activities not only by participating in ceremonies, but also by helping to upkeep religious sanctuaries and/or by helping with other affiliated events. By giving of both time and money as part of religious activities, this could easily impact preferences and attitudes towards those resources.

The experimental design varied two tasks and two types of resources, but the reward was held constant. Although it may be impossible to find a task suitable that everyone will find enjoyable or everyone will find non-enjoyable, one may argue that there are things that they detest more than cleaning toilets or enjoy more than coaching young children on how to play various sports. Also, different types of rewards could be measured as well. If subjects were offered a materialistic reward in the scenario, would they respond differently?

These data along with future endeavors could impact the business world, as well as society. If findings remain robust across age groups, careers, and cultures, it could potentially alter the way products are marketed to consumers. If time continues to be seen as the most valuable resource, companies may want to do all they can to make a shopping trip consume the least amount of time as possible, realizing its importance to the consumer. However, if there are indications that some may value money over time, attention may turn to cutting costs in order to lower prices for consumers as the best way to increase sales. If it is shown that being rich is having money and being wealthy is having time (as suggested by Stephen Swid), perhaps society would rather be wealthy than rich.

## REFERENCES

- Ashton, Michael C., Kibeom Lee, and Sampo V. Paunonen (2002), "What Is the Central Feature of Extraversion? Social Attention Versus Reward Sensitivity," *Journal of Personality and Social Psychology*, 83 (1), 245-252.
- Arkes, Hal R., and C. Blumer (1985), "The Psychology of Sunk-Cost," *Organizational Behavior and Human Decision Processes*, 35, 124-140.
- Eastman, Jacqueline K., Ronald E. Goldsmith, and Leisa Reinecke Flynn (1999), "Status Consumption in Consumer Behavior: Scale Development and Validation," *Journal of Marketing Theory and Practice*, 7 (3), 41-51.
- Eysenck, H. J. (1967). *The Biological Basis of Personality Inventory*. Springfield, Illinois: Thomas.
- Eysenck, H. J. and S. B. G. Eysenck (1992), *Manual for the Eysenck Personality Questionnaire—Revised*, San Diego, CA: Educational and Industrial Testing Service.
- Fitzmaurice, Julie, and Charles Comegys (1993), "Materialism and Social Consumption," *Journal of Marketing Theory and Practice*, 14 (4), 287-299.
- Goldberg, Lewis R. (1992), "The Development of Markers for the Big-Five Factor Structure," *Psychological Assessment*, 4 (1), 26-42.
- Hsee, Christopher K. (1996), "Elastic Justification: How Unjustifiable Factors Influence Judgments," *Organizational Behavior and Human Decision Processes*, 66 (April), 122-129.
- Kasser, Tim, and Richard M. Ryan (1993), "A Dark Side of the American Dream: Correlates of Financial Success as a Central Life Aspiration," *Journal of Personality and Social Psychology*, 65 (2), 410-422.
- Kunda, Ziva (1990), "The Case for Motivated Reasoning," *Psychological Bulletin*, 108 (November), 480-498.
- Lastovicka, John L., Lance A. Bettencourt, Renée Shaw Hughner, and Ronald J. Kuntze (1999), "Lifestyle of the Tight and Frugal: Theory and Measurement," *Journal of Consumer Research*, 26 (June), 85-98.
- Lam, Terrence C., and Kenneth A. Small (2001), "The Value of Time and Reliability: Measurement from a Value Pricing Experiment," *Transportation Research Part E*, 37, 231-251.
- Marmorstein, Howard, Dhruv Grewal, and Raymond P. H. Fishe (1992), "The Value of Time Spent in Price-Comparison Shopping: Survey and Experimental Evidence," *Journal of Consumer Research*, 19 (June), 52-61.
- O'Connell, Nadya L. (2001), "Rewarding Employees With Psychic Income Pays Long-Term Dividends," *Benefits Quarterly*, 17 (3), 7-21.

- Okada, Erica Mina, and Stephen J. Hoch (2004), "Spending Time versus Spending Money," *Journal of Consumer Research*, 31 (September), 313-323.
- Richins, Marsha L., and Scott Dawson (1992), "A Consumer Values Orientation for Materialism and Its Measurement: Scale Development and Validation," *Journal of Consumer Research*, 19 (December), 303-316.
- Richins, Marsha L. (2004), "The Material Values Scale: Measurement Properties and Development of a Short Form," *Journal of Consumer Research*, 31 (June), 209-219.
- Sahadi, Jeanne (2004), "How Much is Your Time Worth?" *CNN Money*, July 8, <<http://money.cnn.com/2004/07/08/commentary/everyday/sahadi/index.htm>>.
- Sato, Toru (2005), "The Eysenck Personality Questionnaire Brief Version: Factor Structure and Reliability," *The Journal of Psychology*, 139 (6), 545-552.
- Soman, Dilip (2001), "The Mental Accounting of Sunk Time Costs: Why Time Is Not Like Money," *Journal of Behavioral Decision Making*, 14 (July), 169-185.
- Thaler, Richard H. (1980), "Toward a Positive Theory of Consumer Choice," *Journal of Economic Behavior and Organization*, 1 (March), 39-60.
- Thaler, Richard H. (1999), "Mental Accounting Matters," *Journal of Behavioral Decision Making*, 12 (September), 183-206.
- Thomson Reuters (2009), "How Much is Your Time Worth?," *MSN Money* <[http://moneycentral.msn.com/personal-finance/calculators/Know\\_The\\_Value\\_Of\\_Your\\_Time\\_Calculator/home.aspx](http://moneycentral.msn.com/personal-finance/calculators/Know_The_Value_Of_Your_Time_Calculator/home.aspx)>

---

**TABLE 1**  
**Summary of Treatment Cell Means**

---

	<i>Enjoyable, Money</i>	<i>Enjoyable, Time</i>	<i>Non-enjoyable, Money</i>	<i>Non-enjoyable, Time</i>
<i>Measures</i>				
Acceptance	6.68 (1.79)	6.77 (2.00)	2.91 (1.87)	3.97 (2.47)
Work Attitude	7.36 (1.14)	7.33 (1.31)	1.89 (1.04)	2.60 (1.83)
Reward Attitude	7.16 (1.43)	7.54 (1.18)	5.62 (2.36)	6.64 (1.86)
Experience Attitude	7.45 (1.17)	7.43 (1.13)	3.33 (1.44)	4.24 (1.96)

---

**TABLE 2A**  
**Summary of Treatment Cell Means for Frugality Tests**

	<i>Frugal, Money</i>	<i>Frugal, Time</i>	<i>Not Frugal, Money</i>	<i>Not Frugal, Time</i>
<i>Measures</i>				
Acceptance	5.03 (2.82)	5.63 (2.72)	4.41 (2.44)	5.17 (2.53)
Work Attitude	5.49 (2.94)	4.98 (2.90)	3.80 (2.76)	4.81 (2.85)
Reward Attitude	6.88 (1.91)	7.34 (1.61)	5.91 (2.16)	6.71 (1.59)
Experience Attitude	6.24 (2.34)	5.96 (2.20)	4.62 (2.35)	5.57 (2.37)

**TABLE 2B**  
**Summary of Treatment Cell Means for Materialism Tests**

	<i>Material, Money</i>	<i>Material, Time</i>	<i>Not Material, Money</i>	<i>Not Material, Time</i>
<i>Measures</i>				
Acceptance	4.89 (2.77)	5.40 (2.76)	4.47 (2.47)	5.34 (2.51)
Work Attitude	4.40 (3.12)	5.03 (2.85)	4.87 (2.78)	4.77 (2.87)
Reward Attitude	6.67 (1.94)	7.01 (1.76)	6.07 (2.22)	7.21 (1.44)
Experience Attitude	5.32 (2.62)	5.95 (2.29)	5.51 (2.32)	5.63 (2.25)

**TABLE 2C**  
**Summary of Treatment Cell Means for Extroversion/Introversion Tests**

	<i>Extrovert, Money</i>	<i>Extrovert, Time</i>	<i>Introvert, Money</i>	<i>Introvert, Time</i>
<i>Measures</i>				
Acceptance	4.49 (2.69)	5.53 (2.84)	4.89 (2.58)	5.21 (2.46)
Work Attitude	4.16 (2.99)	4.99 (3.15)	5.06 (2.89)	4.82 (2.55)
Reward Attitude	6.47 (2.16)	7.25 (1.61)	6.31 (2.04)	6.93 (1.62)
Experience Attitude	5.19 (2.48)	5.76 (2.52)	5.53 (2.45)	5.86 (2.01)

## APPENDIX

### Experimental Scenarios

#### **Money, Not Enjoyable**

You work as a janitor for a local school cleaning toilets. The toilets had not been cleaned in a few weeks and it was not an enjoyable job. For four hours of work, you get paid \$50. You use the \$50 you made from this job for a “night on the town” with a friend. You have dinner at a downtown restaurant, followed by a movie. The food and service at dinner was good and you enjoyed the movie.

#### **Money, Enjoyable**

You work at a local park with children. Your job is to act as a coach teaching young children how to play various sports. The children are kind and well behaved, and you have a good time. For four hours of work, you get paid \$50. You use the \$50 you made from this job for a “night on the town” with a friend. You have dinner at a downtown restaurant, followed by a movie. The food and service at dinner was good and you enjoyed the movie.

#### **Time, Not Enjoyable**

You give four hours of your time assisting a local school by cleaning toilets. The toilets had not been cleaned in a few weeks and it was not an enjoyable job. In return, you get a “night on the town” with a friend. You have dinner at a downtown restaurant, followed by a movie. The food and service at dinner was good and you enjoyed the movie.

#### **Time, Enjoyable**

You give four hours of your time helping coach young children on how to play various sports. The children are kind and well behaved, and you have a good time. In return, you get a “night on the town” with a friend. You have dinner at a downtown restaurant, followed by a movie. The food and service at dinner was good and you enjoyed the movie.