Volume 2, Number 1 *Journal of International Business Disciplines* November 2007

THE CONSUMER'S TIME ORIENTATION AND ITS EFFECT ON THE EVALUATION OF E-TAILER OFFERS

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ABSTRACT

The emergence of the Internet as an information search and product comparison tool for consumers has led to a reduction in time-related search costs. The Internet minimizes search and transaction costs by eliminating time-related issues, such as visiting different retail locations and waiting for service. However, there is often a trade-off regarding the delivery of the product to the customer. This paper examines the relationship between a consumer's time orientation and the perceived appeal of e-tailer offerings. The results of our study and the implications for future research are discussed.

INTRODUCTION

The "time is money" adage attributed to Benjamin Franklin highlights an important cultural value in the United States and other nations. Indeed, the concept of time as an opportunity cost has been researched extensively within the field of economics (cf. Becker, 1965). For instance, the economist Ian Walker developed a simple mathematical formula to calculate the monetary value of time that takes into consideration a worker's hourly wage, tax rate, and cost of living. By assigning it an economic value, time can be seen as a cost to be minimized or as an asset to be prolonged (Jacoby, Szybillo, & Berning, 1976). This helps explain why consumers are willing to pay for timesaving goods and services, yet expend considerable time on shopping sprees.

The purpose of this study is to examine the consumers' evaluation of time-related service attributes relating to an on-line purchase. More specifically, it looks at the perceived benefits or costs of delivery time, financing options, and rebate redemption time associated with the stated on-line offer. It compares responses from individuals with different time orientations, namely present-time-oriented, future-time-oriented, and time-pressed individuals (Amyx & Mowen, 1995; Rojas-Méndez, Davies, Omer, Chetthamrongchai, & Madran, 2002). This paper contributes to the existing literature by considering the relationship between various service activities and the consumer's time orientation, within the framework of an on-line purchasing situation.

CONCEPTUAL FRAMEWORK

THE ECONOMIC VALUE OF TIME:

Within economics, a considerable emphasis has been placed on prescribing a monetary value to the concept of time (Becker, 1965). An employee's hourly wage rate is often used as a proxy for the individual's opportunity cost (Okada & Hoch, 2004). This simple formula, or the inclusion of other economic variables, such as tax rates and the cost of living, can help determine the monetary value of daily activities, such as household chores. This household production is assumed to increase the economic well being of the housing unit, enabling consumers to purchase more goods and services as opposed to paying someone else to do the housework. Other types of time-related activities are viewed as opportunity costs that increase the perceived cost of a product. Nichols, Smolensky, and Tideman (1971) considered the lost cost of waiting in a line and suggested that the relative cost of the good or service being purchased increased as one spent longer waiting to purchase the good. At the same time, the perceived cost of waiting in line is assumed to vary from person to person. Other researchers have focused on the apparent underappreciation of the value of time (Thaler, 1980). For instance, a high wage earner might take the time to mow his or her own lawn as opposed to paying someone else to do the job for a lower wage. This suggests that the opportunity cost of time is ambiguous and can vary within and among individuals (Okada & Hoch, 2004).

THE ROLE OF TIME IN CONSUMER RESEARCH

Within the discipline of marketing, several studies have focused on aspects of time relating to consumer decision making and purchasing behaviors. For instance, Taylor (1994) examined the effect that waiting has on a customer's evaluation of a service. Taylor considered the impact that waiting for service has on the customer's affective responses (anger and uncertainty) and evaluation of the service. Her study considered not only the length of the delay, but also the consumer's attribution for the delay (e.g., Was the cause of the delay something within the service provider's control?) and the degree to which the consumer was able to fill time (e.g., reading a magazine or chatting with a friend). Marmorstein, Grewal and Fishe (1992) considered not only the economic cost of the amount of time spent shopping, but also the perceived enjoyment of the shopping experience. In their study on coupon usage, Babakus, Tat and Cunningham (1988) considered the various time costs associated with searching for, organizing, and redeeming coupons. Their results suggest that the consumer's perceived value of time has a negative relationship with coupon usage.

Within consumer behavior, time has been operationalized as a social (Gurvitch, 1964), multidimensional (Hirschman, 1987; Rojas-Méndez et al., 2002), and subjective (Okada & Hoch, 2004) construct. Researchers have focused on the consumer's disposition towards time, identifying various measures, including time orientation (past, present, future), time pressure, and planning (cf. Rojas-Méndez et al., 2002). Time orientation has in particular received considerable attention. For instance, Gross and Sheth (1989) found that time-oriented advertising appeals had become more predominant within the United States over the last century, reflecting the growing importance and scarcity of time within a modern, Western society.

Time orientation is assumed to differ not only between cultures, but also between individuals

(Amyx & Mowen, 1995). Individuals are seen as future-time-oriented, present-time-oriented, or time-pressed. A future-time orientation can be defined as a "tendency to plan ahead and look at the long term when making consumer decisions" (Amyx & Mowen, 1995, p. 248). Future-time-oriented individuals tend to delay immediate gratification to achieve long-range outcomes that are more favorable. At the same time, they are more likely to advance costs if they perceive it to be in their best interest over the long term. A present-time orientation is defined as a "tendency to not plan ahead and look to the short term or immediate time period when making consumer decisions" (Amyx & Mowen, 1995, p. 248). In this instance, present time-oriented individuals are more willing to focus on immediate gratification by advancing gains and delaying costs. Time pressure is based on the economic viewpoint of time being something of value, a scarce resource that is constantly ticking away (Rojas-Méndez et al., 2002). From a psychological perspective, individuals who feel pressed for time are likely to reallocate activities, rushing certain tasks to make room for others or to increase discretionary time (Rojas-Méndez et al., 2002; Jacoby et al., 1976).

TIME AND ON-LINE PURCHASE PREFERENCES

The emergence of the Internet as an information search and product comparison tool for consumers has led to a reduction in time-related search costs (Wu, Ray, Geng, & Whinston, 2004). The Internet minimizes search and transaction costs by eliminating time-related issues, such as visiting different retail locations, waiting for service, and so on (Athiyaman, 2002). At the same time, there is often a time-related cost relating to the delivery of the product to the customer. Whereas in a brick-and-mortar store the consumer can purchase the product and leave with it in-hand, the on-line customer is more often than not purchasing in advance and then waiting for the product to be delivered by mail. Therefore, the on-line shopper must balance the time saved in searching for information and comparing prices with the time added in waiting for delivery of the product. Indeed, Wu et al. (2004) examined the implications of the "free riding" phenomenon in e-commerce, whereby a consumer uses Internet information services to collect and compare information on various brands and then visits a brick-and-mortar store to make the purchase. In order to diminish free riding tendencies, information search engines, such as cnet.com will not only help inform the consumer about the best brand available, they will also direct them to on-line sites with the lowest prices for the specific brand. In addition, e-tailers companies provide greater flexibility in lead delivery lead-time, whereby consumers can pay higher shipping and handling fees in return for faster delivery service.

AN EXPLORATORY FRAMEWORK EXAMINING TIME ORIENTATION AND ON-LINE PURCHASE BEHAVIOR

The above discussion suggests that time as an opportunity cost is an ambiguous construct that varies among individuals. In addition, researchers have identified various dimensions of time orientation, including future orientation, present orientation, and time pressure. Studies focusing on e-commerce suggest that time is an important variable within the consumer decision making process. To date, however, the authors are unaware of any study that has examined the role of time orientation in the consumer's comparison of e-tailer offers. These offers can be viewed as time-related (e.g., delivery time, mail-in rebates, financing options), quality-related (e.g., e-tailer reputation, customer service, technical support), and price-related (e.g., list price, discount). The purpose of this study is to provide an exploratory analysis of the potential relationships between

the consumer's time orientation (present, future, time pressure) and the three types of categories (time, quality, price) that are used to make comparisons between various e-tailers. Whereas we expect that a consumer's time orientation will have a significant impact on the perceived importance of time-related variables, we are also interested in seeing whether it has an additional impact on the perceived importance of quality and price-related offers. Given the exploratory nature of this study, no *a priori* hypotheses are developed.

METHOD

One hundred ninety students recruited from an American university participated in this study. The mean age of the participants was 26, and 65.8 % were female. The median annual income was in the $40,000 to $59,999 range.

The respondents were given a scenario involving the purchase of a desktop computer. They were told to assume that they had already decided to purchase a specific brand and model, yet the model was available from various e-tailers. Furthermore, they had decided to go on-line and select an e-tailer from whom to make the purchase. They were given information on a technology web search engine that lists the various e-tailers that have a variety of desktop computers for sale and were told that this website compares the e-tailers based on the price (list price, instant rebates), quality (e-tailer reputation, customer service, technical support), and time (delivery time, rebates redeemable through the mail, financing options). Subjects were asked to evaluate the importance of each of these e-tailer attributes when purchasing a desktop computer on-line. Each variable was measured on a seven-point scale, with 1 being "not at all important," 4 being "somewhat important" and 7 being "very important."

Future orientation, present orientation, and time pressure constructs were measured using seven-point Likert type scales developed by Rojas-Méndez et al. (2002). Future orientation was measured using three items: (a) I like to think about what I am going to do in the future; (b) I have control over my future; (c) I have been thinking a lot recently about what I am going to do in the future. The Cronbach's alpha reliability coefficient for this scale was 0.75. Present orientation was measured using four items: (a) I like things that happen unplanned; (b) I live for today; (c) I always seem to be doing things at the last moment; (d) I am mostly concerned about how I feel now (in the present). The Cronbach's alpha reliability coefficient was 0.71. Finally, time pressure was measured using four items: (a) I am always in a rush; (b) Time is precious; (c) I am constantly looking at my watch; (d) I am always looking for ways of saving time. Cronbach's alpha reliability coefficient for this scale was 0.75. In each case, the reliability coefficients exceed the threshold recommended level of 0.70 for established scales (Nunnally, 1978). An average index score ranging from 1 to 7 was computed for each subject for each of the three scales.

RESULTS

Descriptive statistics for the dependent variables are presented in Table 1. A cursory view of mean scores suggests that price-related variables are considered the most important criteria for selecting an e-tailer, closely followed by quality-related variables and then time-related variables. Technical support was considered the most important variable overall, with a mean score of 6.16 out of 7. Among the time-related variables, delivery time was considered the most

important (x = 5.90). Overall, mail-in rebates were considered the least important variable across all three categories, with a mean score of 4.83 out of 7.

TABLE 1. DESCRIPTIVE STATISTICS

Category	Variable	N	Min.	Max.	Mean	S.D.
Time-related variables	Mail-in rebates	187	1	7	4.83	1.620
	Interest free financing	188	1	7	5.71	1.629
	Delivery time	187	1	7	5.90	1.241
Quality-related variables	E-tailer reputation	189	1	7	5.76	1.255
	Customer service	189	2	7	5.98	1.257
	Technical Support	189	2	7	6.16	1.176
Price-related variables	List price	189	1	7	6.06	1.291
	Instant discount	188	1	7	6.01	1.142

Correlation coefficients between the three time-related measures and the various attributes are shown in Table 2. The results suggest that time pressure is positively correlated with the perceived importance of the e-tailer's quality variables (reputation, customer service, technical support) and certain time-related variables (rebates through the mail, delivery time). There is no relationship between time pressure and price or interest free financing. Present orientation is not correlated significantly with any of the variables. Finally, future orientation is correlated with not only two of the time-related variables (interest free financing, delivery time), but also with all the quality variables (e-tailer reputation, customer service, technical support) and the price-related variables (list price and instant discount).

TABLE 2. PEARSON CORRELATIONS BETWEEN TIME ORIENTATION AND E-TAILER ATTRIBUTES

E-tailer Attribute Dimensions	Variable	Time Pressure	Present Orientation	Future Orientation
Time-related variables	Delivery time	.228(**)	.133	.196(**)
	Mail-in rebates	.198(**)	.143	.110
	Interest free financing	-.025	.118	.168(*)
Quality-related variables	E-tailer reputation	.136	-.016	.260(**)
	Customer service	.156(*)	-.038	.214(**)
	Technical Support	.205(**)	-.071	.225(**)
Price-related variables	List price	.088	.061	.199(**)
	Instant discount	.135	-.056	.196(**)

Note: * Correlation is significant at the 0.05 level. ** Correlation is significant at the 0.01 level.

TIME ORIENTATION AND TIME-RELATED VARIABLES

In terms of delivery time, those with a high time pressure were more inclined to find delivery times statistically more important compared to those with a low, time pressure ($F(1,180) = 4.24$, $p = 0.041$, $X_L = 5.67$, $X_H = 6.06$). Similar findings emerge for future-oriented individuals ($F(1,179) = 3.97$, $p = 0.048$, $X_L = 5.70$, $X_H = 6.07$).

Mail-in rebates were more desirable among high, time pressure individuals compared to low, time pressure individuals ($F(1,180) = 4.35$, $p = 0.038$, $X_L = 4.52$, $X_H = 5.03$). The results were not statistically significant, however, for future-oriented individuals ($F(1, 179) = 0.021$, $p = 0.885$).

Interest-free financing was marginally higher among high, future-oriented individuals than low, future-oriented individuals ($F(1,179) = 3.965$, $p = 0.076$, $X_L = 5.47$, $X_H = 5.91$). There were no statistically significant differences for time pressure ($F(1,181) = 0.73$, $p = 0.787$).

TIME ORIENTATION AND QUALITY-RELATED VARIABLES

Future orientation was positively related to the three, quality-related variables. High, future-oriented individuals viewed e-tailer reputation as more important compared to low, future-oriented individuals ($F(1,180) = 10.04$, $p = 0.002$, $X_L = 5.49$, $X_H = 6.05$). Customer service ($F(1,180) = 6.373$, $p = 0.012$, $X_L = 5.74$, $X_H = 6.21$) was also viewed more favorably among high, future-oriented individuals, as was technical service ($F(1,180) = 7.55$, $p = 0.007$, $X_L = 5.95$, $X_H = 6.41$).

Those with high, time pressure viewed technical support as more important compared to those with low, time pressure ($F(1,182) = 5.38$, $p = 0.022$, $X_L = 5.95$, $X_H = 6.35$). There was no statistical difference among the two, time-pressure groups for e-tailer reputation ($F(1,182) = 0.089$, $p = 0.765$) and customer service ($F(1,182) = 1.83$, $p = 0.178$).

TIME ORIENTATION AND PRICE-RELATED VARIABLES

Individuals with high, future orientation expressed marginally greater levels of importance for the list price compared to those with low, future orientation ($F(1,180) = 3.63$, $p = 0.059$, $X_L = 5.89$, $X_H = 6.25$). There was no statistical difference for time pressure ($F(1,182) = 0.15$, $p = 0.70$).

For instant discounts there was no statistical significance for time pressure ($F(1,181) = 0.76$, $p = 0.385$) and future orientation ($F(1,181) = 2.00$, $p = 0.159$). It should be noted that, whereas a statistically significant correlation existed between the future orientation 7-point scale and instant discount ($r = 0.196$, $p = 0.008$), there was no statistical support once individuals were separated into two, future-oriented groups. The allocation of individuals into low, future orientation and high, future orientation was determined by a cut-off point that reflected an even distribution between the two groups. The use of a different cut-off point might have led to a statistically significant result. This being the case, one would expect that high, future-oriented individuals would view instant discounts as more important than low, future-oriented individuals because of the positive correlation between the two variables.

DISCUSSION

The above results suggest that a person's time orientation has an impact on his or her evaluation of the importance of an e-tailer's offer when purchasing on-line. These exploratory findings are presented in a proposed model in Figure 1.

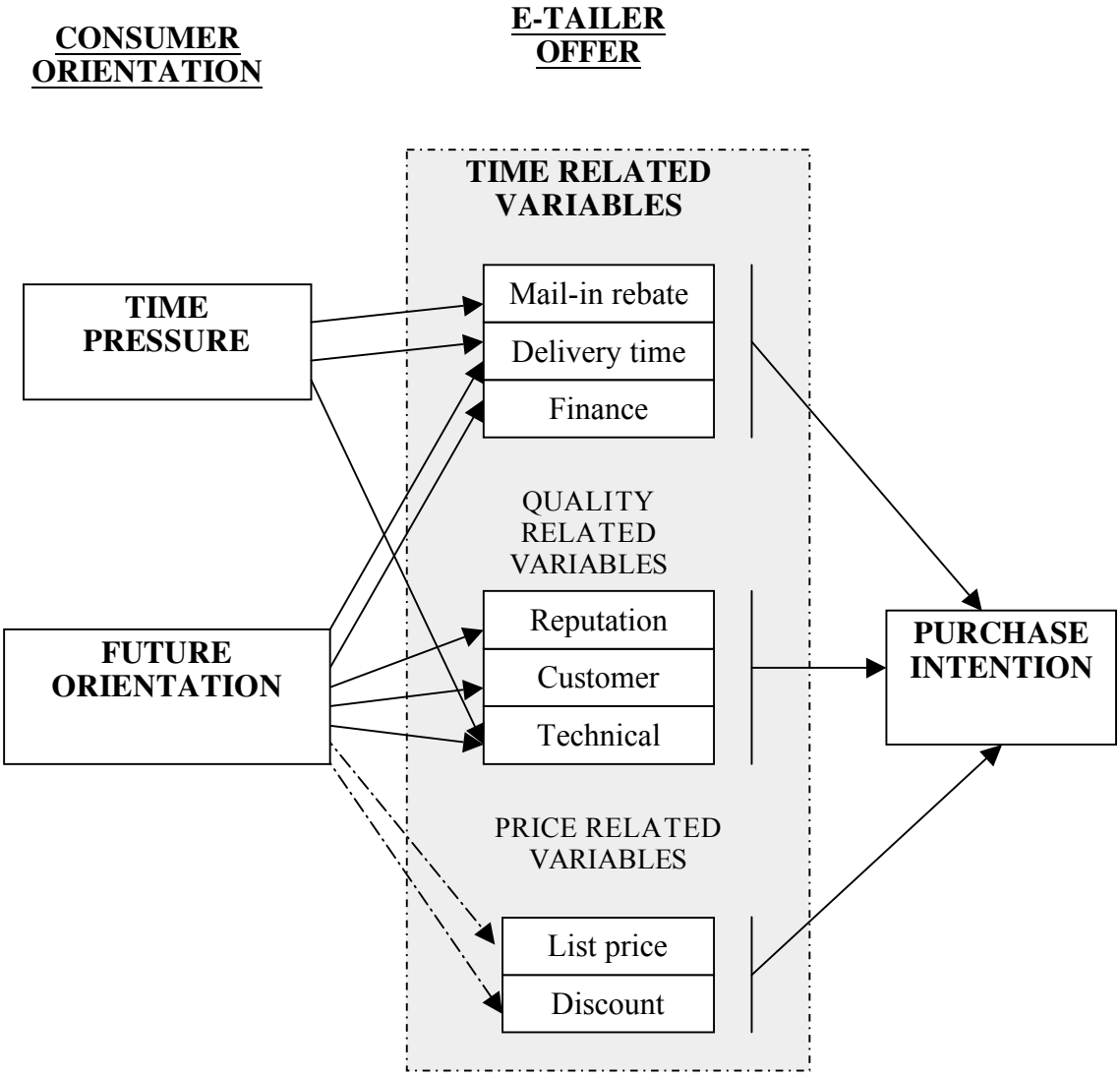

FIGURE 1. PROPOSED MODEL DEPICTING THE RELATIONSHIP BETWEEN TIME ORIENTATION AND E-TAILER PREFERENCE.

FUTURE-ORIENTED CONSUMERS

The results suggest that future-oriented consumers are more concerned with quality variables relating to the e-tailer compared to consumers who are not future-oriented. Individuals who value the future are more likely to be interested in the e-tailer's reputation, its customer service, and technical support. This might be because the consumer is interested in minimizing future problems related to the purchase of the product. In other words, knowing that the e-tailer has a

quality reputation, is customer-oriented, and provides strong technical support means that the future-oriented consumer need not worry about the product arriving damaged, that there will be no problem returning the product if needed, and that the customer will find a helpful and knowledgeable technical staff if any issues arise with the product.

Future-oriented individuals are also more likely to highlight financing options when deciding which e-tailer to use. Interest free financing options are appealing to future-oriented individuals because they are more likely to consider the long-term savings of owning now and paying later, particularly because this can reduce the monetary cost of the purchase when considering inflation. On the other hand, individuals who are not future-oriented are less likely to consider the cost-saving benefits of delaying payment until some time in the future and will be more interested in finalizing the purchase in the present.

Future-oriented respondents viewed the list price to be somewhat more important than respondents who were less oriented toward the future. List price was in general one of the more important variables among all respondents, yet there was a marginally significant difference between these two groups.

The correlation analysis suggests that there is a relationship between future orientation and the importance of discounts, although there was no statistically different support in the univariate analysis of variance. This lack of result in the second analysis might be due to the arbitrary cut-off point between high, future orientation and low, future orientation. A sensitivity analysis that varies the cut off point between the two groups might reveal significant differences between the two groups for this variable. It might be that the future-oriented individuals are more influenced by instant price discounts than consumers who are not future-oriented. This being the case, one explanation might be that future-oriented individuals are more prone to discount tactics, deciding to purchase only when products are put on sale. When no such discounts are available, these consumers might opt to wait, delaying their purchase until some time in the future when price discounts are available. Those who are not future-oriented are still influenced by discounts, but will not delay purchases if discounts are not available. In other words, discounts are a more important concept for future-oriented individuals, who might decide to delay a purchase until such discounts appear. Consumers who are not future-oriented are still sensitive to price discounts, but will also purchase items when no purchase discounts are present.

PRESSED FOR TIME CONSUMERS

Our exploratory results suggest that consumers who view themselves as always being pressed for time are more likely to regard delivery schedules and mail-in rebates as more important than those who are not as pressed for time. Indeed, delivery times might be more important to time-pressed consumers since these individuals view time as a precious commodity and, therefore, view shorter delivery times as a cost saving that significantly improves the overall value of the offering. Those who are less pressed for time, however, are less likely to consider time-saving factors as a significant reduction in cost and are more willing to wait for a product to arrive. Mail-in rebates are also perceived to be important for time-pressed individuals, which at first glance seems to be counter-intuitive. Indeed, one would expect that time-pressed individuals would not like waiting for reimbursement from mail-in rebates. It could be, however, that time-

pressed individuals are more likely to send off their mail-in rebates immediately, whereas those who are not pressed for time are less likely to mail in the rebate straight away and might indeed forget about submitting the rebate altogether or miss the deadline for processing the rebate. It might also be that those with low, time pressure do not like mail-in rebates as much because they are less likely to follow through with the paperwork. Thus, they might view this type of sales promotion as a less important incentive when selecting e-tailers.

Time-pressed individuals are more likely to consider the e-tailer's technical support as an important characteristic compared to those who are not as pressed for time. One explanation for this result could be that these individuals are concerned with potential time-consuming issues with setting up, operating, and repairing the desktop computer and, therefore, view technical support as a potential time-reducing strategy when such problems arise. Time-pressed individuals are looking for hassle-free and efficient service, and, in this instance, postpurchase assistance becomes an important attribute in the decision-making process. An efficient, convenient, and knowledgeable technical support service might, therefore, be an important attribute for e-tailers to promote.

LIMITATIONS AND FUTURE RESEARCH

The limitations of this study provide a framework for future research. The results are based on a convenience sample and cannot be generalized to a larger population. The survey questions asked individuals to rate the relative importance of various attributes, but did not consider the potential trade-offs between the various variables (e.g., Would consumers be willing to pay more for a shorter delivery time?). The survey only considered one product category (desktop computer), and the perceived importance of the various variables might differ across different product categories and price points. Only certain aspects of the marketing mix were considered in relation to the time orientations. Future research should consider other aspects of the marketing mix in the on-line environment that might be influenced by the consumer's time orientation. Finally, future research should consider the effect that a consumer's time orientation has on the decision of whether to purchase on-line or at a traditional brick-and-mortar store.

REFERENCES

Amyx, D., & Mowen, J. C. (1995). Advancing versus delaying payments and consumer time orientation: A personal selling experiment. *Psychology & Marketing, 12*(4), 243-264.

Athiyaman, A. (2002). Internet users' intention of purchase air travel online: An empirical investigation. *Marketing Intelligence & Planning, 20*(4), 234-242.

Babakus, E., Tat, P., & Cunningham, W. (1988). Coupon redemption: A motivational perspective. *The Journal of Consumer Marketing, 5*(2), 37-43.

Becker, G. S. (1965, September). A theory of the allocation of time. *Economic Journal, 75*(9), 493-517.

Gross, B. L., & Sheth, J. N. (1989, October). Time-oriented advertising: A content analysis of United States magazine advertising, 1890-1988. *Journal of Marketing, 53*(10), 76-83.

Gurvitch, G. (1964). *The Spectrum of Social Time*. Dordrecht, Holland: D. Reidel Publishing.

Hirschman, E. C. (1987). Theoretical perspectives of time use. In J. H. Sheth & E. C. Hirschman (Eds.), *Research in Consumer Behavior* (Vol. 2, pp. 55-81), Greenwich, CT: JAI Press.

Jacoby, J., Syzbillo, G. J., & Berning, C. K. (1976). Time and consumer behavior: An interdisciplinary overview. *Journal of Consumer Research, 2*(4), 320-339.

Marmorstein, H., Grewal, D., & Fishe, R. P. H. (1992). The value of time spent in price-comparison shopping: Survey and experimental evidence. *Journal of Consumer Research, 19*(1), 52-61.

Nichols, D., Smolensky, E., & Tideman, T. N. (1971, June). Discrimination by waiting time in merit goods. *American Economic Review, 61*(6), 312-323.

Nunnally, J. C. (1978). *Psychometric Theory* (2nd ed.). New York: McGraw-Hill.

Okada, E. M. & Hoch, S. J. (2004, September). Spending time versus spending money. *Journal of Consumer Research, 31*(9), 313-323

Rojas-Méndez, J. I., Davies, G. Omer, O., Chetthamrongchai, P., & Madran, C. (2002). A time attitude scale for cross cultural research. *Journal of Global Marketing, 15*(3/4), 117-147.

Taylor, S. (1994, April). Waiting for service: The relationship between delays and evaluations of service. *Journal of Marketing, 58*(4), 56-69.

Thaler, R. H. (1980, March). Toward a positive theory of consumer choice. *Journal of Economic Behavior and Organization, 1*(3), 39-60.

Wu, D., Ray, G., Geng, X., & Whinston, A. (2004). Implications of reduced search cost and free riding in e-commerce. *Marketing Science, 23*(2), 255-262.

JOURNAL OF INTERNATIONAL BUSINESS DISCIPLINES

Volume 2, Number 1 November 2007

Published By:
International Academy of Business Disciplines and Frostburg State University

ISBN 1-889754-97-8 ISSN 1934-1822

WWW.JIBD.ORG