2-20-2004

Potential Components of Time Personality: A Literature Review

Jane Ackerson
Western Michigan University, janeackerson@hotmail.com

THE CARL AND WINIFRED LEE HONORS COLLEGE

CERTIFICATE OF ORAL EXAMINATION

Jane Ackerson, having been admitted to the Carl and Winifred Lee Honors College in Fall 1999 successfully presented the Lee Honors College Thesis on February 20, 2004.

The title of the paper is:

Components of Time Personality:

"Potential ~~Time Personality Traits~~: A Literature Review"

Dr. Jay Lindquist, Marketing Department

Esther Page-Wood, Marketing Department

Dr. Joann Roznowski, Marketing Department

Potential Components of Time Personality: A Literature Review

An Honors Thesis
by Jane Ackerson
Department of Marketing

February 20, 2004

Honors Thesis Committee

Jay D. Lindquist, Ph.D., Chairperson
JoAnn Roznowski, Ph.D.
Esther Page-Wood, MBA

Department of Marketing

Potential Components of Time Personality:
A Literature Review
Jane Ackerson

Introduction

What is time? The simple yet puzzling question has been posed on numerous occasions generating various responses. Time can be described as quantifiable, structured, even having monetary value. Time can be viewed in a subjective or objective manner and can be influenced by internal and external factors. Time can create pressure, anxiety, or boredom. According to Robin Green and Mitchell Burgess of the television show, *Northern Exposure*, "time is just something that we assign...past, present, it's all arbitrary...all moments are happening at the same time."

Time is what we perceive it to be. According to Graham (1981), "(the perception of time) is fundamental, and many other perceptions will be biased in one direction or the other depending on the person's perception of time" (p. 335). This perception is a potentially vital component involved in the makeup of time personality. Theoretically, time personality is shaped by many factors affecting the relationship an individual has with time. Initially, the upbringing a person experiences embeds certain characteristics that affect the relationship with time. This includes a person's culture, subculture, social class, reference groups, family or household, demographic variables, psychographic variables, personality and position in family life cycle. These influences affect the way a person perceives and allocates time. Additional time related traits are affected by time perception as well as specific situations and events. A combination of the above affecting factors likely creates a time personality unique to each individual. This resulting time personality affects how a person allocates and subjectively views time. Further, the products purchased, and even ideal workplace environment, are potentially affected by time personality.

Several authors have discussed the concept of time personality. Kaufman, Lane and Lindquist (1991a) offer the challenge for those interested in time to "continue to research and understand the elements that make up a time personality" (p. 97). The

2

proposed challenge is the basis of this report. To do this, the author took an in-depth look at research pertaining to various elements thought to be potentially associated with the concept of time personality.

Objectives

The objectives of the research were to identify potential time personality traits based on a study of the relevant literature and to explore relationships among these characteristics. Some speculation on practical marketplace and research implications were also to be proposed.

Methodology

Articles chosen had to contain information relevant to the study of time personality. Seventeen articles from 1976 to 2003 were included in the study. The articles researched were found in reference lists from articles pertaining to relevant topics. Key word searches were also conducted pertaining to time and personality. The following is a list of the journal and other sources and number of articles (in parentheses) from each: Advances in Consumer Research (1), American Marketing Association conference proceedings (1), Association for Consumer Research conference proceedings (1), Journal of Business and Psychology (1), Journal of Consumer Research (8), Journal of Managerial Psychology (1), Journal of Personality and Social Psychology (1), Time and Society (2), Unpublished Manuscript (1).

In the earlier research, authors began forming and testing ideas regarding the relationship between time and consumer behavior. Gradually, as knowledge on the subject of time and personality increased, the authors' interests became more specific to particular attributes of time and the components of a person's time personality that affected his or her behavior. Each article focuses on one or more characteristics that contribute to time personality. In order to get a more complete understanding of time personality, information was collected and then categorized from each article. A content analysis was conducted to do the latter. Prior to the content analysis, a proposed list of possible personality traits was constructed. The list of proposed traits changed as research was gathered. The result of this literature study was a list of defined characteristics that potentially make up time personality. There is the possibility that not

all potential time personality traits have been identified. The following are nine traits that the author identified as potential time personality characteristics:

1) *polychronic/monochronic tendency,* 2) *time orientation,* 3) *time processing,* 4) *time shortage/surplus,* 5) *degree to which the clock is the focus of life,* 6) *body clock affect,* 7) *economic approach to time,* 8) *resource availability,* and 9) *time structure.* Exhibit 1, found in the appendix, chronologically lists the articles researched and the specific traits found within each article. Attention will now be turned to a discussion of each of these traits. In this report, the traits shall be called "time personality traits." This implies that a person's overall time personality consists of some combination of his or her positions on these time personality traits.

Time Personality Traits

A.   Polychronic/monochronic tendency

The idea of polychronicity (polychronic behavior) and monochronicity (monochronic behavior) was first conceptualized and named in 1959 by Edward T. Hall. He conceptualized "time" as a "silent language" that communicated meaning and ordered activities. He also observed that societies appeared to organize their time use polychronically or monochronically (Kaufman-Scarborough and Lindquist 2002). Interest in this subject has increased within the past few years. As a result, studies on activity levels have impacted marketing and organizational decision-making.

Polychronic behavior traditionally has been defined as a form of behavior where a person engages in two or more activities during the same block of time (Kaufman-Scarborough and Lindquist 1999). An example of a person displaying polychronic tendencies would be someone comfortably using their cell phone while standing in line to checkout at the grocery store. People that have stronger polychronic tendencies are called "Polychrons." In contrast, monochronic behavior occurs when activities are

performed one at a time and people who display stronger monochronic tendencies are labeled as "Monochrons" (Kaufman-Scarborough and Lindquist 1999).

Until recently, a specific definition of "activity" was not presented. In an unpublished article, Kaufman-Scarborough and Lindquist (2002) identified four different activity types that should be presented to study respondents when evaluating their activity level. The activities are "1) *physical activity,* where some part of the body/physical strength is used to do something, 2) *mental activity*, where the mind is used to picture or think about something, 3) *monitoring*, in which some action that has been started is continuing, but little or no attention needs to be given until certain checkpoints are reached and /or the task is completed; and, 4) *sensory-based activity*, (such as listening, watching, or reading), in which attention is given to something by eye or ear" (p. 13). This variety of activity forms was not explicitly considered in earlier studies and could have impacted a person's view on their activity level.

Greater details on these time personality characteristics began to surface in articles written around 1981 (see Feldman and Hornik; Graham). Graham discussed the impact of an individual's culture on their relationship with time. This included activity level characteristics embedded within cultural tendencies. Graham noted that individuals with certain cultural backgrounds, such as Latin Americans, were prone to overlap and switch between activities and were less likely to worry about being punctual. In contrast to this, he found that individuals with a Western cultural background were more likely to pursue one task at a time while promptly following a schedule. Articles that followed touched on the impact of activity levels in organizations (Kaufman et al. 1991a), the connection of activity levels with role overload (Kaufman et al. 1991b; Kaufman-

Scarborough and Lindquist 1998) and consumer preferences towards activity levels in specific situations (Kaufman-Scarborough and Lindquist 1999).

This background research provided the opportunity to focus on polychronic and monochronic approaches to time with in particular environments and situations. Within the work environment, it was found that people not only have different approaches to time, but also each organizational culture has a separate approach to time (Kaufman, Lane, and Lindquist 1991a; Kaufman-Scarborough and Lindquist 1998). Francis-Smythe and Robertson (1999) found that some companies have a mechanistic structure that is characterized by "specialization of tasks, closely defined duties, responsibilities and technical methods, and a clear hierarchical structure," appealing to monochrons. Other companies can be considered to have an organic structure that is characterized by "much greater flexibility, adjustment and continual redefinition of tasks, a network structure of control, authority and communication, lateral consultation, and commitment to the work group and its tasks," appealing to polychrons. Within organizations, to avoid conflict and create a harmonious environment, it has been suggested that individuals displaying a particular time personality would most likely work best with persons exhibiting a similar time personality (p. 288).

Kaufman-Scarborough and Lindquist (1999) observed that individuals were able to switch between monochronic and polychronic time approaches depending on the situation and set task. They measured an individual's level of polychronicity using the Polychronic Attitude Index (PAI). Their findings showed that within the sample, overall behaviors and feelings appeared to be consistent with preferences for polychronic or monochronic time use. Additionally, the preferences for the sample suggested, "their

marketplace behaviors also match tendencies towards polychronic or monochronic time use" (p. 156).

The marketplace has responded to consumers' increasing needs for polychronic behavior by altering products to fit (see Fox and Nickols 1983; Kaufman-Scarborough and Lindquist 1999). A few examples of these include cruise control on automobiles, clothes dryers and microwave ovens with signals to indicate task completion, cell phones, e-mail and voice mail systems. Fox and Nickols (1983) conducted a study focused mainly on the actions of working and non-working wives. Both were found to use convenience goods to increase the number of simultaneous activities possible and ease switching between activities. The previously mentioned study using the PAI concentrated on a more general audience in regards to activity level. Kaufman-Scarborough and Lindquist (1999) stressed the need for a more formal recognition of the monochronic-polychronic time use preference spectrum. They believe this would allow marketers to develop additional products, services, distribution, promotion and selling strategies that are on-target to fit consumer time-use behaviors (p. 156).

B.   Temporal (time) orientation

Temporal orientation is a person's preference to focus on the past, the present, or the future. This appears to be a learned phenomenon. For example, Bergadaa` (1990) quoted Lewin's statement made in 1938 explaining that "the ability to organize life within a framework of time is not innate in humans, but is acquired and developed from infancy; the role of parents in children's education greatly influences their future temporal orientation" (p. 291).

As noted earlier, several sources (see Kaufman, Lane, and Lindquist 1991a) confirm the three main temporal orientations: past, present and future. A "future-oriented" person is thought to base their decisions on future expectations. These people feel that the conditions in the future will be better than those in the past or present. This view is more dominant in western cultures including North America and Northern Europe. A "present-oriented" person is likely to focus on what is happening in the current moments. They do not place importance on future expectations or past experiences. This perspective is more dominant in the cultures of Latin America. A "past-oriented" person bases his or her decisions on standards developed in the past. The conditions of the past are seen as better than those in the present or future. This orientation is more common in far eastern countries such as China, Japan, and Korea.

The culturally embedded orientations affect the way people value time, money, and activities. For example, present-oriented individuals typically do not focus on investing in the future. According to Graham (1981) present-oriented individuals "have few opportunities to invest and, thus, do not develop the same notion of time value of money as their counterparts who are better off both financially and educationally" (p. 337). As a result, present-oriented people are more likely to spend their money now as opposed to future-oriented individuals who save and invest it. This relationship with time and money is further discussed under the economic time concern time personality trait.

In a study conducted by Bergadaa` (1990), responses from individuals indicated that there also is the possibility that people have multiple orientations that vary depending on the situation. According to Kaufman, Lane, and Lindquist (1991a) "standardization is the process of making adjustments in one's own preferred time style to fit with the time

style of another person, organization, or societal unit. Thus the individual adjusts his or her time approach, orientation, activity level and commitment and use styles as required by specific situations" (p.88). In the workplace, different positions are a "best fit" for people with different time orientation personalities. A future-oriented person would best fit in a position where future planning and investment is involved. These authors also noted that when peoples' needs and personalities are matched by beneficial variables in the workplace there are likely to be favorable outcomes. This match between the individuals' needs and the organization's culture are thought to contribute to a satisfactory workplace performance.

Initial studies of orientation (e.g., Graham 1981) were used by authors of later work (Bergadaa 1990; Bond & Feather 1988; Kaufman, Lane, and Lindquist 1991a) to help them propose ways to improve products, services, and environments to compliment a person's time orientation. In the study by Bergadaa` (1990), the attempt was made to understand how consumer actions (motivation and behavior) were influenced by their temporal orientation. It was found that future-oriented people prefer products and activities that would fulfill a need and enrich them in some way. It also was found that present-oriented people tended to desire relaxing activities and products that they could enjoy instantly. As a result, future-oriented individuals were more action-based, preferring to control the situation, product or environment. On the other hand, present-oriented people were more reaction-based, preferring to allow their situation to take control.

Other researchers continued to relate temporal orientation to consumer actions. Some contrasted the pattern of relations among time orientations across cultures as well

as between time orientations and shopping orientations (Holak and Kaufman 1992). The objective was to distinguish among time orientations across consumers within a culture so as to help to explain variability in this phenomenon. Havlena and Holak were in search of a better understanding of individuals with a past orientation (Holak and Kaufman 1992). The idea was to discover what foods and smells evoke nostalgic feelings. With this information, marketers could then better develop products and services to fit consumers with past orientations.

C.   Time processing: linear-separable, circular-traditional and procedural-traditional

Graham (1981) suggested that in addition to temporal orientations, the categorization of time is based on different temporal processing perceptions. Three temporal processing models have been suggested: linear-separable, circular-traditional and procedural-traditional.

The linear-separable model (also referred to as linear or ribbon) views time as having a past, present and future that can be separated into various, discrete units. With this view, as time is believed to be separated into discrete units, time is often equated to money. This is especially relevant in the concept of time value of money where importance is set on investing now for the future. Western civilizations typically follow this model.

The circular-traditional model (also referred to as circular or cyclical) views time in a rhythmic manner where the same events are repeated according to some cyclical pattern. The future is expected to be like the past since it is thought that the clock does not regulate actions, rather natural cycles regulate actions. Because there is little importance placed on the future, little importance is placed on investing for the future.

As a result, poorer people who process time in a circular-traditional way will likely purchase high quality merchandise now as opposed to saving their money for the future. Latin Americans tend to fall under this circular-traditional time model.

The procedural-traditional model (also referred to as procedural) views activities as procedure-driven rather than time-driven. With this process "people following a procedure without regard to time are consuming the procedure, not the time" (Graham 1981: p.337). It is believed that the amount of time spent on an activity is irrelevant. It is also believed that the activity begins and ends when the "time is right." Native Americans, for example, tend to fall into this procedural-traditional model.

It was previously mentioned that most work environments have a future-orientation, following the linear time processing style (Kaufman, Lane, and Lindquist 1991b). This allows people in the workplace to follow schedules and meet deadlines more efficiently. Contradicting previous research, Francis-Smythe and Robertson (1999) discussed the idea that work environments no longer follow any of the originally defined time processes. Instead, time is fragmented and multiple. According to the discussion, people are "required to be able to master fluid and flexible temporal regimes" (p. 276). In general, environments have evolved such that the result is time being processed in a task-oriented manner with less separation between work and leisure. In either case, people initially form a time perception that can be modified as necessary for the situation with which they are faced.

D.   Sense of time shortage/surplus

"Time has become a major currency of today's demanding society, with uneven distributions of time creating pressure or boredom, and frenzy or leisure" (Kaufman-

Scarborough and Lindquist 1999: 151). The way that individuals personally perceive time is considered to be their psychological approach to time (Kaufman, Lane, and Lindquist 1991a). This involves subjective time perceptions including awareness, speed, value, duration, supply, and variety versus routine. Whether a person experiences time surplus or shortage varies depending on their workload, consumption habits, leisure activities and a multitude of related factors including subjective perception of situations. It is arguable, however, that in reality some people are constantly in surplus or shortage of time. In a recent article (Kaufman-Scarborough and Lindquist 2003), it was proposed that, "perceptions of time scarcity and time abundance are directly related to individuals' time styles, comprised of their methods for analyzing available time, their time-planning tools, and their methods for estimating a match between perceived time and actual activities"(p. 350). With each individual, there are impacts from external and internal factors.

Time pressure and role overload result from a perceived shortage of time. Time pressure is the amount of actual or perceived time remaining before one must act or complete an activity (Jacoby et al. 1976). According to Kaufman et al. (1991b), "roles define what must be done and often establish the priorities and schedules for carrying out necessary activities. Thus, roles can place competing demands on available money, time, information, goods and skills, creating a type of conflict known as role overload"(p. 393).

Consumer's who suffer from time shortage state that it is important to economize time use when shopping. In their article, Jacoby et al. (1976) discussed the idea that consumers under severe time pressure would tend to place greater weight on the negative product information than would consumers under less pressure. Studies (see Kaufman,

Lane, and Lindquist 1991b; Strober and Weinberg 1980) have discussed ideas for marketing implications that will aid in reducing consumer's sense of time pressure and role overload. One idea is to alter packaging so that visual search time is reduced, allowing for an increase in the consumer's ability to absorb product information (Kaufman-Scarborough and Lindquist 1999).

The concept of role overload was explored by Reilly (1982) through a study conducted measuring the time behavior of workingwomen and non-working women. The study results showed that working does not necessarily result in role overload, rather, "role overload stems from the totality of the position set, and the presence of a work position is not sufficient to cause role overload in all cases" (p. 414). Working wives and non-working wives were found to use different "time-buying" strategies to relieve time pressures. Workingwomen suffering from role overload were likely to compensate for time at work by decreasing time spent on household production, volunteer work, leisure, and sleep time.

There was a positive side found with role overload. Reilly (1982) noted four basic positive outcomes could result from taking on an additional role: role privileges, status security, status enhancement, and personality involvement. According to Reilly, "working wives might not perceive additional role overload, even though their total workload has increased" (p. 409). This is because a person's time and energy devoted to a particular role position may reflect their commitment to that position as well as their available time and energy. In the case of working wives, the amount of role overload expressed for their particular family role might be low because of their level of

commitment to that role. With a less committed individual, excuses offered for a lack of participation are often mistaken for role overload.

Perceptions of temporal overload not only affect the individual, but they affect the organization as a whole. Task overload contributes to psychological distress, anxiety, and job dissatisfaction. Francis-Smythe and Robertson (1999) measured individual differences in regards to time perception. They found that highly impatient people have high leisure time awareness, and as a result, they are predisposed to stress and strain reactions under conditions of task overload. There are opportunities for organizations to enact strategies that would enable both organizations and members to cope with perceived time pressures. Kaufman, Lane, and Lindquist (1991a) suggest exploring the idea of adjusting time to personalize each employee's schedule. This would, "modify the way time is scheduled and used in performing a given job, without actually changing the job to be accomplished" (p. 98). One example given to adjust employee time conflicts is through the use of "flex time." Flex time allows employees to alter their work hours to adhere to outside schedules. These authors continued by suggesting that, "flex time may also help with discrepancies caused by physiological (body) rhythms, such as those who perform more efficiently after mid-day nap, or would classify themselves as morning or evening people" (p. 98).

This is only one example of time adjustment options. There are further options that should be considered when examining time adjustment. For instance, with the use of technology, Kaufman, Lane, and Lindquist (1991a) believe that income-producing-obligated time (work tied to a specific schedule) could be reduced and transferred to income producing time which is not obligated to a given clock time. "This might allow

parents with young children to handle obligations with children while accomplishing all their obligations to the organization" (p.99). These options would help avoid conflict in the workplace and limit the sense of overload. The overall goal behind time adjustments in the workplace is to attain time congruity, a fit between the individual's time personality and that of the organization. These authors also suggest that, "there may be a linkage between time congruity and wellness, quality of life, safety, and staffing. Time congruity is important in production, effectiveness, and efficiency" (p. 103).

E.   Degree to which the clock is the focus of life

While the degree to which a person focuses their life on the clock is a definite component of a person's time personality, it was not often found in the articles reviewed for this piece. Francis-Smythe and Robertson (1999) examined the idea within the work environment. The authors noted that the focus on the clock varies depending on the person's occupation. For example, a teacher is more likely to be clock dependent in comparison to a caregiver. This is because teachers must conduct lessons in designated time increments while caregivers must accommodate to the unpredictable needs of others. To allow for this difference, a caregiver type position would more likely benefit from a flexible clock time while a profession similar to that of a teacher would prefer fixed work hours.

Time is typically accounted for using conventional units (hours, days, months and years), in physical terms (day, night), or biological terms (waking, sleeping). Punctuality, activity coordination, synchronization and pace of activities and the aspect of quality versus speed are involved in the measurement of time. Awareness of an actual clock time, the experience in time passing, and perception of control over time are also factors that

affect the degree to which the clock is the focus of life (Francis-Smythe and Robertson 1999).

F. Body clock affect

Kaufman et al. (1991a) described body clock affect as a physiological effect of time where a person's daily biological clock affects and controls periods of sleep, alertness, mood, and performance. In their research, Feldman and Hornik (1981) discussed this largely unexplored area of consumer time experience as it involves physiological influences arising from the daily biological rhythms of human life. They considered physiological effects using Palmer's findings from 1970. The research revealed that "a relationship has been found between body temperature and the perception of time: an elevated body temperature leads to foreshortened time perception" (p. 412). However, further research was not conducted to understand what affects the overall climate had on body temperature and time experience.

In 1986, Coleman recognized that biological rhythms likely impact time personality and are a major determinant of performance and satisfaction in daily activities. Such rhythms would affect a person's sleeping patterns, mood, performance and alertness. Because people have different biological rhythms, some work best in the morning while others prefer working in the afternoon or evening. As mentioned previously in the sense-of-time-shortage/ surplus discussion, one way to alleviate these differences would be to use flex time, allowing an employee to choose their work hours to best fit with their biological rhythms (Kaufman, Lane, and Lindquist 1991a).

G. Economic time concerns

In 1748, Benjamin Franklin wrote, "Remember that *time* is money" (Jacoby et al. 1976). This phrase illustrates the economic view of time. According to this view, time can be budgeted, spent, saved, and invested. The economic perspective perceives time as a fixed resource.

The economic view of time varies among cultures. As mentioned earlier, there are three main ways that people process time: linear, cyclical and procedural. The economic view of time is primarily found among people who process time linearly. Economic time is such that "time is spent on the task, and if the task is not completed at a certain time one speaks of being behind, at which point one must 'make time' in order to be finished" (Graham 1981: 335). Here the phrase "time is money" applies. When people process time in a cyclical or procedural way, there is little or no connection between time and money. Graham suggests that the reason for this can be found in our understanding of the circular-traditional model. He states that "given the orientation to the present and the lack of a concept of slicing time into discrete segments, there is little connection seen between time and money" (p. 337).

An economic point of view must also be considered in the workplace with regard to compensation. As mentioned earlier, not everyone views time as money. If they do value time in an economic sense, then a traditional time and money approach, involving a specified salary, may be appropriate compensation. However, if this is not the case, then other appeals such as non-monetary incentives, vacations, or breaks in the workday, may be more valuable (Kaufman, Lane, and Lindquist 1991a).

There have been studies conducted (see Fox and Nichols 1983; Strober and Weinberg 1980) observing the nature of women, both working and non-working, with

regard to time approaches. It was found that wives tend to view time in an economic sense. There is a constant attempt to buy and save time due to role overload. Strober and Weinberg (1980) actually proposed certain strategies that employed wives might use to reduce time pressures. These women could reduce the quality and/or quantity of household production, decrease time allocated to volunteer work, or reduce leisure time activities in order to save time. The women in the study were found to look to convenience goods and "paid help" to "buy time." This "purchased time" results in increased leisure time.

Jacoby et al. (1976) quoted Kotler stating "Americans are increasingly placing more value on time than on goods." The authors added that "not only do a multiplicity of non-consumer-related activities and events demand portions of our limited time resources, but even the ownership and utilization of goods require a variety of time expenditures. All this serves to produce a 'growing shortage of time' in highly industrialized societies" (p. 327). Because more emphasis is placed on time in comparison to goods, convenience goods have increased in demand. Consumers "sell time" in the labor market and "buy time" through such items as convenience goods. The amount of money spent on leisure-time-related goods and services is sensitive to changing economic, demographic and lifestyles conditions. The combination of time and the right market goods improves household productivity and thereby increases satisfaction.

H.   Resource availability: temporal (time), economic and spatial

In the field of consumer behavior, time has been studied in relation to economic, sociological, and psychological variables. However, Bergadaa` (1990) discussed the idea

that "the transformation of time from something 'that passes' into something 'that is used up' is a new pattern arising from the construction of industrial time and the generalization of clocks in Western society" (p. 290). Jacoby et al. (1976) discussed time as a resource in the sense that time exists in limited and finite qualities. These authors came to the conclusion that time is a basic, intangible resource and that the freedom to use time can be acquired by trading another resource, such as money or effort.

In general, all activities use time, physical space, and money to varying degrees. Feldman and Hornik (1981) quoted a statement from Kelly in their research realizing that "most differences in time allocation can be explained by differences in resource availability" (p. 410). The authors discussed the idea of three resource types that act as activity constraints (or enablers): temporal (time), economic and spatial. The temporal view of activities focuses on the frequency and duration of the activities, including the time at which they take place and the elapsed time of the activity from start to finish. The economic view of the activity relates to the monetary cost of the activity. The spatial resource refers to the location of the activity in regards to the distance, region and place. Feldman and Hornik (1981) believe that every human activity uses these three resources to varying degrees. They stated that an, "individual's time allocation decision is constrained by the availability of all three resources" (p. 410).

In an organization, time is an important resource. Kaufman, Lane, and Lindquist (1991a) touched on the idea that time is used as a measurement factor that underpins the synchronization of activities. This is necessary in an industrialized society. With regard to work, an economic view is taken towards time allocation. There is a trade off between time and money where the more time spent at work results in more money and less

leisure time for the individual. If one were to reduce time spent at work, he or she would increase the amount of leisure time available. However, there would be a decrease in the amount of money available to the individual.

I.   Time structure

According to Bond and Feather (1988), time structure is defined as the "degree to which individuals perceive their use of time to be structured and purposive" (p. 321). Through their study using the Time Structure Questionnaire (TSQ), Bond and Feather (1988) aimed to confirm their theory by developing a time structure variable.

Kaufman et al. (1991a) referred to the TSQ results noting the proposed statement that "time structure and purpose in the use of time is positively related to psychological well-being, health, purpose in life, hope, optimism about the present and futures, and Type A goal-striving, although it is difficult to establish (prove) the causal direction of these relationships" (p. 86). Bond and Feather (1988) noted the need for future research in time structure that could determine the correlations among perceived use of time, role demands, and personality variables.

Conclusions

The first conclusion is that the following nine traits, although probably not completely independent of one another, are the theoretical components of time personality: 1) polychronic/monochronic tendency, 2) time orientation, 3) time processing, 4) time shortage/surplus, 5) degree to which the clock is the focus of life, 6) body-clock affect, 7) economic approach to time, 8) resource availability, and 9) time structure. Each time personality trait also appears to be influenced by one or more other variables. The traits seem to be associated in a web-like manner, interconnecting to form

the time personality structure. Exhibit 2, found in the appendix, shows an illustrated example of this web-like connection.

A person's polychronic and monochronic behavior tendencies appear to directly affect the way the actual amount of time possessed is perceived and used. Concerning time use, an individual might first define his or her activities and then, based on needs, would likely prioritize them as "primary" or "secondary." Those that are primary would get more attention in the moment than those determined to be secondary. This also helps determine which activities can be combined with others (polychronic behavior) or which need to be done individually (monochronic behavior). If he or she tends to prefer to multitask activities, there is a greater chance of fewer reported accounts of role overload. This is because polychrons are able to improve their time use by engaging in several activities in a given time block as opposed to only completing one task. However, if the individual has a more monochronic tendency, when faced with multiple activities, there is a greater chance the individual will feel a sense of overload. The awareness of time pressure or shortage influences how a person actually experiences time. When activities are measured in time increments, pressure is created to complete the activity in its given time block. As mentioned previously concerning sense of time shortage or surplus, an uneven distribution of time can create pressure. Also, the perceived shortage of time is directly related to an awareness of the clock. This indirectly connects polychronic and monochronic tendency to the degree to which the clock is the focus of life.

Through the initial connection to the time shortage or surplus trait, polychronic and monochronic behavior tendencies likely ultimately influence the way time is viewed as a resource as well as through its economic characteristics. In this situation, a person

displaying monochronic behavior tendencies will most likely budget his or her time and may even place a monetary value on it. This means time is being viewed as a resource. When "time is money" there is the opportunity for it to be "used up" or "traded" for another resource.

The time personality trait, temporal orientation, likely is interrelated with time horizon. Time horizon involves how far out a person looks when planning activities. Is his or her focus in the short, intermediate, or long term as he or she considers the past, present or future. For example, a person may choose not to plan or look very far into the future at all. In this case, they would have a short time horizon. As a result some people might falsely consider them to be present oriented. As discussed earlier, the cultural temporal positions embedded in a person have potential affect on orientation and processing of time. As a result, the two traits are likely interrelated. For example, if a person has future orientation, they will typically process time in a linear manner. The relationship is also situationally dependent, where one or all characteristics may change if necessary. The way time is processed may depend on how the person plans or manages activities. Depending on the situation, specific activities may take a primary or secondary role. Time structure also is affected by a person's internal body clock. Biological rhythms impact a person's performance and satisfaction levels.

In essence, it is likely that none of the nine time personality traits are completely independent of one another, but are interrelated. Some are more dependent on other characteristics than others; however, all traits work together to create a complete time personality unique to each person. A person's time personality probably is not static. It will change with life experience and depend on the situation or task at hand.

Discussion

It is possible that other factors such as culture, subculture, social class, reference groups, family or household, demographic variables, psychographic variables, personality and position in family life cycle may also influence a person's approach to time in addition to the nine proposed traits. A more comprehensive analysis of the traits and additional variables that influence them as potentially part of a person's time personality should be pursued by researchers in the future. A determination and understanding of the correlations among time personality traits also would be useful. Individual scales to measure the nine traits need to be developed and the overall relationships among these scales can be determined using structural equation modeling techniques. Once a model is constructed, it should be tested in the general population to verify validity and reliability.

It also would be useful for researchers to explore the impact that specific situations and events have on time personality. As discussed previously, a person's time personality likely shifts based on the specific situation that he or she is facing. Considering this in future projects, researchers could propose specific marketplace settings where products or services, along with time personality, could affect behaviors. Examples such as weddings, birthdays, or other holidays may alter prioritization and scheduling of activities. Researchers also should take into account the impact that these specific events may have on peoples' lives.

Once further research is conducted to firm up the existence and construct of time personality, the information will be beneficial for use in the marketplace and workplace. Researchers have already written about the impact that matching time personality, work schedule, and work environment can have on performance and satisfaction levels. Once

further analysis on time personality is conducted and a scale is composed to measure time personality and its traits, organizations can use the results to improve the work environment. By understanding employee workplace time personalities, environments and schedules can be tailored to allow for maximized performance and satisfaction.

The marketplace has already begun altering products to work with changing lifestyle conditions. The need for convenience products will only continue to rise as society becomes more "time-deprived." Marketers can use the results of the study of time personality to alter products, services, or the environment to enhance the customer's overall shopping experience. One example would be to decrease distractions in the shopping market so that the customer can focus in mainly on products. To change the environment, sensory-based activities (audio or visual distractions) should be minimized. It was previously mentioned that elevated body temperatures result in foreshortened time perception. As a result, to maximize consumer-shopping time, temperatures should be kept cooler.

Other researchers have mentioned possible improvements in product packaging. Written words on product packaging should be clear and concise. The consumer should be able to glance at the product and easily determine product benefits. The benefits should be those sought by a person displaying the "right" (matching) personality traits. For instance, to appeal to a polychron experiencing time shortage, the packaging could state how the product could be used "on the go". The benefits could also be specified in present or future terms, appealing to people with different orientations and time processes.

It was previously mentioned that people are working more and spending less time on leisure activities. To increase money spent on leisure activities, travel industries can highlight the availability of work and play on vacation. By mentioning the current availability of offices with Internet and fax machines in hotels, vacationers will be more aware of the option to work and relax in the same environment.

These are just a few examples of how a more thorough understanding of the subject of time personality will help in work and marketplace environments. Kaufman, Lane, and Lindquist (1991a) challenged us, "to continue to research and understand the elements that make up a time personality" (p. 97). The challenge now is for researchers to further analyze and test these traits, their relationships to one another, situational impact, and the possible influence of other external variables.

References

Bergadaa, M.M. (1990), "The Role of Time in the Action of the Consumer", *Journal of Consumer Research*, Vol. 17, December, pp. 289-301.

Bond, M.J. and Feather, N.T. (1988) "Some Correlates of Structure and Purpose in the Use of Time", *Journal of Personality and Social Psychology,* Vol. 55 No.2, American Psychological Association, Inc., pp. 321-329.

Feldman, L.P. and Hornik, J. (1981), "The Use of Time: An Integrated Conceptual Model", *Journal of Consumer Research*, Vol. 7, March, pp. 407-419.

Fox, K.D. and Nickols, S.Y. (1983), "Buying Time and Saving Time: Strategies for Managing Household Production", *Journal of Consumer Research,* Vol. 10, September, pp. 197-208.

Francis-Smythe, J. and Robertson, I. (1999), "Time-related Individual Differences", *Time & Society*, Vol. 8(2), pp. 273-292.

Graham, R.J. (1981), "The Role of Perception of Time in Consumer Research", *Journal of Consumer Research,* Vol. 7, March, pp. 335-342.

Hawes, D.K. (1977), "Time Budgets and Consumer Leisure-Time Behavior", *Advances in Consumer Research,* Vol. 4, pp. 221-229.

Holak, S.L. and Kaufman, C.F. (1992), "Remembering the past, juggling the present, anticipating the future: Time orientation, its time measurement, and its role in consumption behavior", *ACR Conference Special Session Proposal.*

Jacoby, J., Szybillo, G.J. and Berning, C.K. (1976), "Time and Consumer Behavior: An Interdisciplinary Overview", *Journal of Consumer Research*, Vol. 2, March, pp. 320-339.

Kaufman, C.F., Lane, P.M. and Lindquist, J.D. (1991a), "Exploring More than 24 Hours a Day: A Preliminary Investigation of Polychronic Time Use", *Journal of Consumer Research*, Vol. 18, December, pp. 392-401.

_____ (1991b), "Time Congruity in the Organization: A Proposed Quality-of-Life Framework", *Journal of Business and Psychology*, Vol. 6 No. 1, Fall, Human Sciences Press, Inc., pp. 79-105.

Kaufman-Scarborough, C. and Lindquist, J.D. (1998), "Time Management and Polychronicity: Comparisons, Contrasts, and Insights for the Workplace", *Journal of Managerial Psycology*, Vol. 14 No. ¾, MCB University Press, pp. 288-312.

_____ (1999), "The Polychronic Attitude Index: Refinement and Preliminary Consumer Marketplace Behavior Applications", *American Marketing Association*, Winter, pp. 151-157.

_____ (2002), "Polychronicity: Its Meaning, Measurement, and Contribution to Consumer Research", *Unpublished manuscript.*

_____ (2003), "Understanding the Experience of Time Scarcity: Linking Consumer Time-Personality and Marketplace Behavior", *Time and Society*, Vol. 12 No. 2/3, Sage Publications, pp. 349-370.

Reilly, M.D. (1982), "Working Wives and Convenience Consumption", *Journal of Consumer Research*, Vol. 8, March, pp.407-418.

Strober, M.H. and Weinberg, C.B. (1980), "Strategies Used by Working and Nonworking Wives to Reduce Time Pressures", *Journal of Consumer Research*, Vol. 6, March, pp. 338-348.

Article/ Author(s)/ Year

1 "Time and Consumer Behavior" Jacoby, Szybillo & Berning 1976	D, G
2 "Time Budgets & Consmer Leisure Time Behavior" Hawes 1977	D, G
3 "Strategies Used by Working and Nonworking Wives to Reduce Time Pressures" Strober & Weinberg 1980	D, G
4 "The Role of Perception of Time in Consumer Research" Graham 1981	A, B, C, G
5 "The Use of Time: An Integrated Conceptual Model" Feldman & Hornik 1981	A, G, H
6 "Working Wives and Convenience Consumption" Reilly 1982	D
7 "Buying Time & Saving Time: Strategies for Managing Household Production" Fox & Nichols 1983	D, G
8 "Some Correlates of Structure and Purpose in the Use of Time" Bond & Feather 1988	B, D, I
9 "The Role of Time in the Action of the Consumer" Bergadaa 1990	B

Key:

A = Polychronic/Monochronic Tendency; B = Time Orientation; C = Time Processing;
D = Sense of Time Shortage/Surplus; E = Degree to which the Clock is the Focus of Life;
F = Body Clock Affect; G = Economic Time Concerns; H = Resource Availability; I = Time Structure

Exhibit 1

Article/ Author(s)/Year

10 "Time Congruity in the Organization: A Proposed Quality of Life Framework" Kaufman, Lane & Lindquist 1991a	A, B, F, G, H, I
11 "Exploring More Than 24 Hours in a Day" Kaufman, Lane & Lindquist 1991b	A, D, G
12 Proceedings of the 1992 ACR Proposal Holak, Kaufman et al. 1992	A, B, D
13 "Time Management & Polychronicity" Kaufman-Scarborough & Lindquist 1998	A, G
14 "The Polychronic Attitude Index: Refinement & Preliminary Consumer Marketplace Behavior Applications" Kaufman-Scarborough & Lindquist 1999	A, E
15 "Time Related Individual Differences" Francis-Smythe & Robertson 1999	A, C, D, E
16 "Polychronicity: Its Meaning, Measurement & Contribution to Consumer Research" Lindquist & Kaufman-Scarborough Unpublished	A
17 "Understanding the Experience of Time Scarcity" Kaufman-Scarborough & Lindquist 2003	A, D

Key:

A = Polychronic/Monochronic Tendency; B = Time Orientation; C = Time Processing;
D = Sense of Time Shortage/Surplus; E = Degree to which the Clock is the Focus of Life;
F = Body Clock Affect; G = Economic Time Concerns; H = Resource Availability; I = Time Structure

Exhibit 1

Exhibit 2
Time Personality Web

This exhibit shows the web-like connection between the time personality traits. The color of each circle denotes the tentative level of connection to time personality.

Key:

- ■ Time personality

- ■ Time personality traits with a direct connection to central circle

- ■ Second level of connection/ direct connection to time personality traits

- ■ Third level of connection to time personality/ indirect connection to time personality traits

- ■ Fourth level of connection to time personality
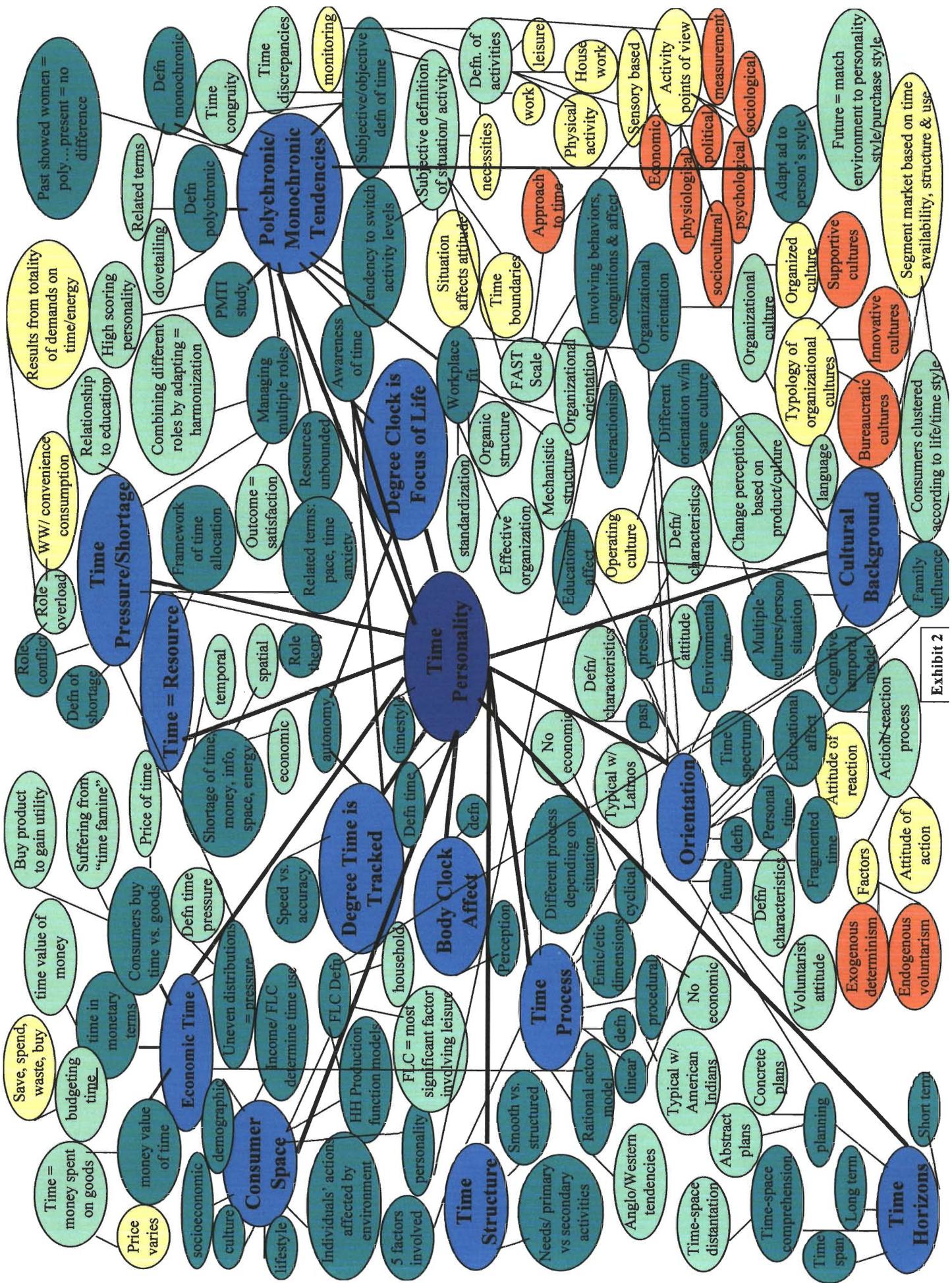
- ■ Fifth level of connection to time personality

Exhibit 2

Exhibit 2

Time Personality

Polychronic/Monochronic Tendencies
- Defn monochronic
- Time congruity
- Time discrepancies
- monitoring
- Related terms
- dovetailing
- Defn polychronic
- Past showed women = poly...present = no difference
- High scoring personality
- PMTI study
- Combining different roles by adapting = harmonization
- Relationship to education
- Results from totality of demands on time/energy
- Subjective/objective defn of time
- Defn. of activities
- Subjective definition of situation/ activity
- necessities
- work
- leisure
- House work
- Physical activity
- Sensory based
- Activity points of view
- Economic
- physiological
- political measurement
- sociological
- sociocultural
- psychological
- Tendency to switch activity levels
- Situation affects attitudes
- Time boundaries
- Approach to time
- Adapt ad to person's style
- Future = match environment to personality style/purchase style
- Segment market based on time availability, structure & use

Time Pressure/Shortage
- Framework of time allocation
- Managing multiple roles
- Awareness of time
- Resources unbounded
- Outcome = satisfaction
- Related terms: pace, time anxiety
- WW/ convenience consumption
- Role overload
- Role conflict
- Defn of shortage

Time = Resource
- temporal
- spatial
- economic
- Role theory
- autonomy
- Shortage of time, money, info, space, energy
- Price of time

Degree Clock is Focus of Life
- Workplace fit
- FAST Scale
- Organic structure
- standardization
- Mechanistic structure
- Effective organization
- Educational affect
- Operating culture
- Organizational orientation
- Organizational interactionism
- Involving behaviors, cognitions & affect
- Organizational orientation
- Organizational culture
- Different orientation w/in same culture
- Typology of organizational cultures
- Organized culture
- Supportive cultures
- Innovative cultures
- Bureaucratic cultures
- Defn/ characteristics
- Change perceptions based on product/culture
- language

Cultural Background
- Family influence
- Consumers clustered according to life/time style
- Cognitive temporal model
- Defn/ characteristics
- past, present
- attitude
- Environmental attitude
- Multiple cultures/person/ situation
- Time spectrum
- Educational affect
- Attitude of reaction
- Action/reaction process
- Personal time
- Fragmented time
- Attitude of action
- Factors
- Voluntarist attitude
- Exogenous determinism
- Endogenous voluntarism

Orientation
- Typical w/ Latinos
- No economic
- defn
- future
- Defn/ characteristic

Time = money spent on goods
- money value of time
- Save, spend, waste, buy
- budgeting time
- Price varies
- socioeconomic
- culture
- demographic
- lifestyle

Consumer Space
- Individuals' action affected by environment
- 5 factors involved

Economic Time
- Buy product to gain utility
- Suffering from "time famine"
- time value of money
- Consumers buy time vs. goods
- time in monetary terms
- Defn time pressure
- Uneven distributions = pressure
- Income/ FLC determine time use
- HH Production function models
- FLC = most significant factor involving leisure
- FLC Defn

Degree Time is Tracked
- Speed vs. accuracy
- Defn time
- timestyle
- household
- defn

Body Clock Affect
- Perception

Time Process
- Different process depending on situation
- Emic/etic dimensions
- cyclical
- linear
- procedural
- No economic
- defn

Time Structure
- Smooth vs. structured
- Needs/ primary vs secondary activities
- Rational actor model
- Anglo/Western tendencies
- Typical w/ American Indians
- Abstract plans
- Concrete plans

Time Horizons
- Time-space distantation
- Time-space comprehension
- Time span
- planning
- Long term
- Short term