

Perspectives on Time

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Abstract

Time perspective is a preferential direction of an individual's thoughts toward the past, present, or future, which exerts a dynamic influence on their experience, motivation, thinking, and several aspects of behavior. This chapter discusses the theoretical and conceptual bases of this construct, as well as existing approaches to measuring time perspective, such as the Zimbardo Time Perspective Inventory. Major research findings with regard to time perspective are considered, including its influence on educational achievement, risk taking, and negative reminiscence. Further attention is paid to the patterns of relationships between various time perspective types and several aspects of well-being, highlighting the limitations associated with allowing any one time perspective to dominate. The idea of a balanced time perspective is suggested as an alternative to any particular temporal bias. In an optimally balanced time perspective, the past, present, and future components engage flexibly, in response to individuals' values and preferences, whilst taking into account a situation's context and demands at the same time.

Keywords: balanced time perspective, psychological time, psychology of time, time perspective

Philosophers, scientists, sociologists, and anthropologists have all studied time processes in a multitude of ways. One of the central philosophical debates of whether time is subjectively or objectively based has informed very different approaches to conceptualizing and studying time, and they have been subsequently utilized by social scientists. This chapter will first outline this debate before moving to consider the construct of time perspective (TP), one of the key areas of research within the subjective paradigm. The chapter will then introduce the reader to the theoretical foundations of TP, discuss the major approaches to its measurement, review relevant research findings and comment on possible future directions in research and practice.

The origins of this debate can be traced back to the early Greek philosophers Heraclitus and Zeno, arguing about the reality of change, and therefore time. Yet it is St. Augustine and Newton who are usually credited as the major proponents of the dichotomous perspective on the nature of time.

Augustine believed that time is nothing in reality, but exists only in the mind's comprehension of reality. "What then is time? If no one asks me, I know; if I want to explain it to a questioner, I do not know. But at any rate this much I dare affirm I know: that if nothing passed there would be no past time; if nothing were approaching, there would be no future time; if nothing were, there would be no present time. . . . It's in you, o my mind, that I measure time" (cited in Elliot, 1997, p. 14). Newton, on the other hand, argued that time is an infinitely large container for all events, and that the container exists with or without the events, maintaining thus that time has an objective quality.

The debate, which, throughout the centuries, attracted a number of noble advocates (see Boniwell, 2006), is reflected in the current representations of time that are also largely dualist. To summarize the existing positions, on the one hand, time is approached as an objective phenomenon that is sometimes called "geographical" or "clock" time.

This position regards time as linear and continuous, homogeneous, infinitely divisible, objective, and universal. Such a view is dominant in Western societies where time can be scheduled, measured, coordinated, and is externally created and reinforced by society. The objective perspective on time, however, can be seen as twofold in itself as it relies on two distinct meanings of objectivity. The first meaning concerns ontological objectivity, which is a claim that time has an independent existence from an observer. The second meaning of objectivity refers to the shared collective representation of time, which through the process of internalization leads to objectifying time and identifying it with the clock.

On the other hand, time is approached as an internal subjective phenomenon (Gorman & Wessman, 1977). This facet of time has been variously named by different theorists as “psychological time” (Golovakina & Kronick, 1989, p. 2), “time as it is processed by the human mind” or “subjective experience of time” (Levin & Zakay, 1989, p. 2), “the inner time of the mind” (Melges, 1982, p. 10), or “lived time” (Gorman & Wessman, 1977, p. 227). Psychological or lived time events, occurring simultaneously as marked by the calendar, can be experienced by individuals in very different ways: one event may seem vivid and still current, whereas another one is perceived as having occurred “ages ago.” Thus, subjective time is influenced by pace, life stages, changes in life, contents and sequence of thoughts, feelings, and the activities of individuals (Hendricks & Peters, 1986). In subjective time, events may be discontinuous and their flow uneven. The same duration of events as measured by the clock may be experienced very differently when participants “lose” themselves in the process. Furthermore in one’s mind time can flow backward as well as forward. This time has a unique significance and meaning for each individual.

Until relatively recently, temporal matters have not received much attention from the social sciences, but this pattern is now changing. Time has played a number of roles within research in that it can be approached as an independent and dependent variable of interest and as a key methodological factor (McGrath, 1988). Consistent with the dualist perspective on the nature of time, there appear to be two distinct approaches to studying time. The psychological study of objective time centers on time use or time budget research, concerned with the allocation of time to activities over a 24-hr period. Within a subjective paradigm, studies have

focused on time estimation and subjective duration of experience, time personality, time congruity, time urgency, time intensity, polychronicity and monochronicity, subjective time use, and TP. However, one of the major dependent variables in experimental and cognitive psychology—reaction time (RT)—blends the objective recording of clock time with subjective responding. Research on time management also combines features of both approaches, relying largely on attitude surveys while tying time management behaviors to clock-related outcomes.

One of the key areas of research within subjective approaches to studying time concerns TP, or an individual’s cognitive way of relating to the concepts of the past, present, and future, which affects decision making and subsequent actions. This construct may be of particular interest to positive psychologists because of its documented relationships with the measures of well-being and well-functioning (see, for example, Boniwell, 2005). The remainder of the chapter will consider this construct in more detail.

Time Perspective: Theoretical and Conceptual Bases of the Construct

Time perspective (TP) has been defined as a preferential direction of an individual’s thoughts toward the past, present, or future, which exerts a dynamic influence on their experience, motivation, thinking, and several aspects of behaviour (De Volder, 1979). Lennings (1996) highlights both cognitive and affective aspects of the construct in his definition of TP as “a cognitive operation that implies both an emotional reaction to imagined time zones (such as future, present or past) and a preference for locating action in some temporal zone” (p. 72). In lay terms, TP is not unlike different colored spectacles through which one can look at the world. Wearing present-colored spectacles enables an individual to fully engage with the present moment, unaware of past determinants or future consequences. Putting on the spectacles of the past colors the present and the future in the shades of things gone. When looking at the world through future lenses, every action taken today is evaluated from the position of tomorrow.

Lewin (1948) was one of the first researchers to stress the importance of TP in the study of human behaviour. For him, the life space of an individual expanded across the temporal zones of past, present, and future, and influenced not only emotions and actions but also moral choices. More recent time

researchers—notably Nuttin (1985), Cottle (1976), Wessman and Gorman (1977), Lennings (1996, 1998), and Zimbardo and Boyd (1999)—have supported the Lewinian belief that future and past events have a fundamental impact on present behavior to the extent that they are present in the person's everyday cognitive reasoning.

One literature review identifies up to 211 different ways of approaching the concept of TP (McGrath & Kelly, 1986). In an attempt to organize and disperse findings originating from inconsistencies in defining and operationalizing TP, Kazakina (1999) writes of six major dimensions contributing to the construct, namely temporal orientation, extension, density, emotional valence, temporal continuity, and balance. "Temporal orientation" is defined as a preference for either the past, present, or future TP. "Temporal extension" is the length of time over which one projects cognitions and feelings into the past or future, with the longer future extension being associated with a range of favorable outcomes (such as delayed gratification, academic achievement, high IQ, and responsibility) in children and adults. A proportional allocation of significant events, experiences, or mental representations across time zones is known as "temporal density," while "emotional valence" refers to the affective attitudes that individuals associate with a certain temporal region. "Temporal continuity" is understood as the ability of a person to perceive their past, present, and future as meaningfully connected and integrated. Finally, "temporal balance" is enabled by the equality of thoughts and feelings attached to the past, present, and future and is theoretically associated with a balanced personality and the well-functioning of an individual (Rappaport, Enrich, & Wilson, 1985). Despite a wealth of research available, relatively few studies have considered TP in its complexity and across all three temporal zones, with the majority focusing on the future as an object of investigation (Kazakina, 1999).

The formation of TP is believed to be heavily influenced by the processes of socializing, modeling, education, cultural, and other environmental factors (Seginer, 2003; Zimbardo & Boyd, 1999). Heckel and Rajagopal (1975) compared the future TP among Indian and American college students and discovered striking differences in their extension of the future perspective, with American students having a longer future TP than their Indian counterparts. Levine and Barlett (1984) have found substantial cross-cultural differences in the future TP among both adults and students in Australia, Brazil,

India, and the United States. Levine and Wolff (1985) developed a novel way of measuring TP of cultures in their studies of pace of time. Looking at three basic indicators of time—the accuracy of a country's bank clocks, the speed at which pedestrians walked, and the average time it took a postal clerk to sell a stamp—they compared six different countries. Japan appeared the leader in temporal pace, followed by the United States, England, Italy, Taiwan, and Indonesia.

Overall, Protestant nations tend to be more future oriented than Catholic nations, due to the enduring legacy of the Protestant work ethic, encouraging the pursuit of personal responsibility and the development of future tasks. In turn, the Gross National Product indices are higher among Protestant than among Catholic nations. Cultures with more individualistic focus tend to be more goal focused and future oriented than those emphasizing collectivism. Within countries, however, people living in southern areas tend to be more present oriented than those in northern regions (Bonniwell & Zimbardo, 2004).

Empirical data point to systematic changes in TP, both across a life span and across a variety of situations (Gorman & Wessman, 1977; Melges, 1982, 1990; Nuttin, 1985; Shmotkin, 1991). Zimbardo and Boyd (1999) demonstrate that TP may be affected by situational forces (such as inflation), being on vacation, or under hypnosis. There is some evidence that an individual's TP varies in pathological conditions and abnormal states (Edlund, 1987; Friedman, 1990; Melges, 1982). For example Beiser (1987) has shown that during periods of acute stress refugees focus more on the present rather than the past or future, irrespective of their habitual temporal orientation. Nevertheless, despite being affected by upbringing and environmental forces, TP can become a relatively stable personality trait when a particular temporal bias comes to dominate one's outlook and behavior.

Measuring Time Perspective

Existing instruments devised to measure TP reflect the multiplicity of the approaches to the construct. A large number of the scales focus on one or two temporal regions, most often the future and/or present. Among these are a Future Anxiety Scale (Zaleski, 1996), the Consideration of Future Consequences Scale (Strathman, Gleicher, Boninger, & Edwards, 1994) and the Sensation-Seeking Scale that accentuates present-oriented perspective (Zuckerman, 1994). Bond and Feather

(1988) developed a well-known instrument called the Time Structure Questionnaire, which taps into subjective dimension of time. Present orientation is one of the five factors underlying their time structure construct. However, a multiple-dimension approach to measuring TP is strongly favored in the literature (Jones, 1994; Kazakina, 1999; Tismer, 1987). Early attempts to capture the complexity of TP in a single instrument range from the Circles Test (Cottle, 1976) to the Time Lines (Rappaport, Enrich, & Wilson, 1985) that were designed to elicit a spatial analog for the lengths of time subjects had lived relative to the length of life considered as still left. Other notable measures include the Time Reference Inventory (Roos & Albers, 1965), the Time Attitude Scale (Nuttin, 1985), the Time Competence Scale (Shostrom, 1964), and the Stanford Time Perspective Inventory (Zimbardo, 1990).

Few of the measures have enjoyed a widespread acceptance because of either their questionable psychometric properties or a limited focus on a single temporal zone. Having addressed many of the shortcomings of the previous attempts, a single, integrated TP scale has been developed, which combines the dimension of emotional valence with measuring temporal orientation across the past, present, and future. The Zimbardo Time Perspective Inventory (ZTPI; Zimbardo & Boyd, 1999) exhibits high test-retest reliability, as well as good convergent and discriminant validity. A consistent five-factor structure revealed through exploratory principal component factor analysis and further supported by confirmatory factor analysis explains 36% of variance. Five factors underlying the ZTPI—past-negative, past-positive, present-hedonistic, present-fatalistic and future factors—were derived from series of exploratory studies and have been continuously empirically refined. ZPTI appears to be the most frequently used scale in recent TP studies.

Considering a characteristic profile of an individual biased in the direction of each TP allows us to substantiate ZTPI factors. The person who is future oriented is concerned with working for future goals and rewards, often at the expense of present enjoyment, delaying gratification, and avoiding time-wasting temptations. The present situation is therefore contemplated in terms of future consequences. More specifically, people with future TP are more likely to floss their teeth, eat healthy foods, and get medical checkups regularly. Items on the future TP scale include, among others, "Meeting tomorrow's deadline and doing other necessary work come before tonight's play," and "When I want to achieve something, I set

goals and consider specific means for reaching those goals."

The ZTPI distinguishes between two very different ways of being focused on the present. The present-hedonistic person lives in and for the moment, is often a pleasure seeker, enjoys high-intensity activities, thrills, and new sensations, and is open to adventures. He or she would score highly on items such as "I take risks to put excitement in my life." Children are primarily present-hedonistically oriented. The downside of this orientation is the lack of regard for future consequences. The present-fatalistic TP, on the other hand, is characterized by helplessness, hopelessness, and a belief that spiritual, governmental, or other outside forces control one's life. This TP orientation is expressed by statements including "It doesn't make sense to worry about the future, since there is nothing that I can do about it anyway" and "Fate determines much in my life."

The past TP is associated with focus on family, tradition, history, and continuity of self over time. This too can be either positive or negative. The past-positive TP reflects a warm, pleasurable, though often sentimental view of one's past, with an emphasis on maintaining relationships with family and friends. The past-positive scale contains items such as "Happy memories of good times spring readily to mind" and "I enjoy stories about how things used to be in the 'good old times'." The past-negative TP is characterized by items such as "Painful past experiences keep being replayed in my mind." It reflects a generally negative, pessimistic, and aversive attitude toward the past, which may be based on actual traumatic life events or a negative reconstruction of past occurrences.

Major Research Findings

The TP construct has been found to be related to many attitudes and values, and predictive for a wide range of behaviors (Keough, Zimbardo, & Boyd, 1999; Zimbardo & Boyd, 1999; Zimbardo, Keough, & Boyd, 1997). Although many findings are significant, only those of particular interest to positive psychology are reviewed here.

In comparison to the other time orientations, an extensive amount of research has been carried out on the future TP. It is commonly argued that the future TP is what differentiates humans from animals, who are always in the present and lack the capacity for abstraction and conscious intentionality required for conceptualization of the future (Snyder, Rand, & Ritschel, 2006). There is much support to suggest

that the future TP is associated with several positive outcomes, such as high motivation, sense of responsibility, ability to organize and plan actions, and self-efficacy (Lennings & Gow, 1997; Seijts, 1998). This orientation appears predominant in students and other learners across the boundaries of culture, gender, and socioeconomic status. De Volder and Lens (1982) found evidence that an extended future TP is an influential factor in academic performance improvement. Mello and Worrell (2006) report a significant positive association of educational achievement with future positive attitudes in a large sample of academically talented adolescents. Negatively correlated with depression and hopelessness (Breier-Williford & Bramlett, 1995), the future TP even predicts the extent to which unemployed people use their time constructively to seek jobs, rather than watching TV and engaging in other avoidant coping strategies (present oriented; Epel, Bandura, & Zimbardo, 1999).

Risk taking is a characteristic behavior of those high on either present-hedonistic and -fatalistic TP scores, which correlate positively to dangerous driving, frequent smoking, consumption of alcohol and drugs, and sexual promiscuity (Rothspan & Read, 1996; Zimbardo, Boyd, & Keough, 1999). In particular, the present-fatalistic attitude is depicted in a desire to live shorter lives and has been shown to be significantly positively associated with aggression, anxiety, and depression, and negatively with educational success (Mello & Worrell, 2006; Zimbardo & Boyd, 1999).

Ruminating on the past may be commonly paralleled with stagnation, yet it was found to be related to very different outcomes, depending on its valence. For example, Lyubomirsky and Nolen-Hoeksema (1995) have demonstrated that negative rumination is associated with predominantly past-negative orientation and also correlates with depression, anxiety, unhappiness, low self-esteem, and aggression. On the other hand, Bryant, Smart, and King (2005) have established that the frequency of naturally occurring positive reminiscing, a characteristic of the past-positive TP, predicted a perceived ability to enjoy life.

Relationship between Time Perspective and Subjective Well-Being

If TP is such a powerful influence on our behavior, its relationship with well-being cannot be overlooked. Given positive associations between the future TP and important life outcomes, a large number of theorists and researchers have claimed

that a focus on the future is fundamental to well-being and positive functioning (Kahana & Kahana, 1983; Kazakina, 1999; Wessman & Ricks, 1966; Wills, Sandy, & Yaeger, 2001; Zaleski, Cycon, & Kurc, 2001). On the other hand, Boniwell and Zimbardo (2004) have warned of the drawbacks of an excessive future orientation which are workaholicism, minimizing the need for social connections, not taking time for occasional self-indulgence, nor being grounded in a sense of community and cultural traditions. Recent studies within positive psychology have found no relationship between the future TP as measured by ZTPI and various aspects of well-being (Boniwell & Linley, in preparation; Foret, Steger, & Frazier, 2004; Tov, 2004), casting doubt on the supremacy of future orientation among the temporal zones.

There are conceptual grounds though to suggest that a time orientation with a focus on the present is a necessary prerequisite for well-being (Boyd-Wilson, Walkey, & McClure, 2002). The experience of well-being can only take place in the here and now, which give present orientation a special status. Yet emerging empirical evidence indicates only a modest positive association between the present hedonistic TP and life satisfaction and between the former and recreation satisfaction. Furthermore, the present-hedonistic TP appears to correlate positively with both positive and negative affect, possibly reflecting the tension between “work and play” attitudes (Boniwell & Linley, in preparation; Tov, 2004).

It is, in fact, the past temporal orientation that shows the most robust associations with well-being measures. In a sample of older adults, Kazakina (1999) has established a positive relationship between the past-positive orientation and life satisfaction. These findings were supported by Boniwell and Linley (in preparation), Foret et al. (2004), and Tov (2004) using student respondents. A similar pattern has emerged with regard to positive affect, meaning in life, and self-actualization. It may be that the positive past holds the keys to happiness. Consistent with this premise, Bryant et al. (2005) found that a 10-min daily reminiscing for a week resulted in the increase of happiness feelings, especially for those who used cognitive imagery as compared to memorabilia.

Balanced Time Perspective

Focusing predominantly on the future may bring academic success, or reminiscing may increase one's happiness, yet if a TP starts to dominate to the extent

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that it excludes or minimizes the others, it becomes dysfunctional. There are costs and sacrifices (often expressed through loss of human ties) associated with emphasizing an achievement-oriented future TP. Enjoying the moment and unreasonable risk taking seem to go hand in hand. Even positive past orientation has drawbacks that may include being excessively conservative, being cautious, avoiding change and openness to new experiences and cultures, sustaining the status quo, or trying to apply old solutions to the new problems.

A balanced TP has been proposed as a more positive alternative to living life as a slave to any particular temporal bias (Boniwell & Zimbardo, 2004). "In an optimally balanced time perspective, the past, present and future components blend and flexibly engage, depending on a situation's demands and our needs and values" (Zimbardo, 2002, p. 62). Essential to a balanced TP is the ability to switch between different TPs and being able to fully engage with the situation in hand, without lingering in an inappropriate temporal zone. There are early indications that people with the balanced TP are likely to be happier than the rest. A recent study by Boniwell and Linley (in preparation) has operationalized balanced TP as scoring in the top 50% on all three positive TPs, and in the bottom 50% on the past-negative and present-fatalistic orientations. Good size relationships were observed between the balanced TP and several measures of well-being, many of which were higher than the relationships found for individual TP types.

Future Directions in Research and Practice

Although ZTPI appears reliable, valid, and easy to use, it offers a lot of scope for future development. Only 36% of the variance is explained by the five factors, calling for modification or expansion of the factor structure. Further studies utilizing confirmatory factor analysis are needed to assess the existing factor structure and psychometric properties of the subscales, similar to the studies carried out by Lennings (2000a, 2000b), who examined the precursor to ZTPI—the Stanford Time Perspective Inventory (Zimbardo, 1990). One of the most likely trajectories for expansion of the factor structure is the application of an affective dimension to the future ZTPI factor. It is theoretically possible to distinguish between the future-positive and future-anxious perspectives, characterized by different regulatory mechanisms underlying working for future rewards (e.g., integrated vs. introjected regulation; Ryan & Deci, 2000). It is plausible that

the lack of a relationship between the future TP and well-being can be explained by the lack of valence in the future ZTPI factor. Indeed, while Foret et al. (2004) found no association between the future TP and well-being, they report a positive relationship between the future-positive TP (which they defined as hope) and measures of meaning of life and life satisfaction. Furthermore, it is possible that other TP factors can be identified, for example, an atemporal factor, concerned with abstract thinking not bound by a temporal zone.

Further research is urgently required to enrich our understanding of the balanced TP. An intensive case study can shed more light on what it means to have a balanced TP and how it can be developed. The pattern of associations between a balanced TP and the Big Five, other personality variables, and different behaviors needs to be established. Furthermore, the relationships between TP and other constructs within a subjective paradigm of time (e.g., time personality, time urgency, polychronicity, subjective time use) also deserve investigation.

Implicitly and explicitly, time is an important factor in one-to-one talking practices (such as psychotherapy and coaching). Some examples are potential differences in the subjective sense of time of the client and the therapist, as well as temporal processes at the points of encounter and ending. In terms of practical applications, Boniwell (2005) suggests several ways in which the construct of TP can be consciously and usefully applied in the consulting room. These include raising awareness of unproductive responses associated with habitual temporal orientations; devising strategies to develop underused temporal zones; finding the links and connections between past and present events and future aspirations in order to develop continuity; questioning the dominance of the future TP in Western societies; and evaluating an impact that this social belief has on individual lives.

The last point holds particular relevance for educational policy, which is predominantly future centered. Although undoubtedly useful in preparing children and young people for the world of work, it is also instrumental in the perpetuation of bias. It can be suggested on the basis of empirical evidence that in order to maximize both educational achievement and well-being, a greater emphasis needs to be placed on the development of a balanced TP. Giving equal importance, if not time, to valuing individual and community history, encouragement of social relationships, and intense experiential involvement

in play and learning activities, alongside working for future rewards, may in the long run result in a more balanced and flexible society.

Questions

1. How can the Zimbardo Time Perspective Inventory be refined to include valence in the future time perspective factor?
2. What are the major mechanisms underlying the development of a balanced time perspective?
3. In what ways can the construct of time perspective be usefully addressed in applied settings?

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AQ4

QUERIES TO BE ANSWERED BY AUTHOR (SEE MANUAL MARKS)

IMPORTANT NOTE: Please mark your corrections and answers to these queries directly onto the proof at the relevant place. Do NOT mark your corrections on this query sheet.

Chapter 27

Q. No.	Pg No.	Query
AQ1	299	"Zimbardo, Boyd, & Keough, 1999" has not been listed in the references list. Please check.
AQ2	301	Please update the reference "Boniwell and Linley, in preparation".
AQ3	301	Please provide place of publication for Boniwell & Zimbardo (2004).
AQ4	302	Please provide page range for Snyder et al. (2006).

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