# Exploring the Role of Time Perspective in Leisure Choices

What About the Balanced Time Perspective?

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#### Abstract

Time perspective (TP) plays a key role in various aspects of human behaviour. This paper proposes for the first time an integrated model that explores the role that five TPs (past-negative, past-positive, present-fatalistic, present-hedonistic, and future) and having a balanced time perspective (BTP) play in the amount of free time available, leisure benefits sought and leisure activities. The results obtained from a sample of 320 university students reveal that how people understand time is a key predictor of leisure choices. Our study also reveals that having a BTP is a healthy way to enjoy leisure time, which has considerable potential in regard to practical interventions in leisure education and counselling.

**Keywords:** Zimbardo Time Perspective Inventory, free time, benefit, activity, Spain

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## Introduction

The concept of time orientation or time perspective (TP) is based on the idea that people place emphasis on the past, present or future (Bergadaà, 1990). The centrality of TP, which is used to explain general attitudes toward life and the reasons for human behaviour, has been recognised in psychology (Zimbardo & Boyd, 1999). TP is widely regarded as an important aspect of overall personality (Davies & Omer, 1996; Shores, 2005), and individuals' personalities play a key role in predicting why people choose to pursue leisure activities (Barnett, 2013). However, only a handful of studies have accounted for how individuals' TPs are related to their leisure choices. Shores and Scott (2007) showed that TP had a stronger influence on leisure benefits than did socio-demographic variables. Philipp (1992) concluded that people with a strong future orientation appeared to seek many specific leisure activities more frequently than those with a strong present or past orientation. It can thus be stated that there are signs that different TPs might influence people's leisure preferences (Cotte & Ratneshwar, 2003; Philipp, 1992; Shores, 2005; Shores & Scott, 2007). Furthermore, with the exception of some studies in the field of positive psychology, most research has focused on analysing biased TPs without studying a balanced time perspective (BTP). People with a BTP have the ability to shift from one TP to another. They are capable of operating in a temporal mode (past, present, and future) that is appropriate to the situation in which they find themselves (Zimbardo & Boyd, 1999). Thus, for example, in some situations people with a BTP can be oriented toward the present, while in others they can be oriented toward the past or future (Boniwell & Zimbardo, 2004). A BTP has been associated with higher subjective well-being (Boniwell, Osin, Linley, & Ivanchenko, 2010; Drake, Duncan, Sutherland, Abernethy, & Henry, 2008). However, no previous studies have investigated the differences in the leisure choices between BTP and non-BTP groups.

The purpose of this study is to explore the roles that five TPs (past-negative, past-positive, present-fatalistic, present-hedonistic, and future) and having a BTP play in the amount of free time available, leisure benefits sought and leisure activities. The five TPs were measured by using an adaptation of the Zimbardo Time Perspective Inventory (ZTPI; Zimbardo & Boyd, 1999). Like Barnett, leisure time and free time are considered to be interchangeable terms in the present study.

#### Literature review

#### **Time Perspective**

The effective operationalization of TP requires an adequate conceptualisation of this construct. Different definitions of TP have been used in the literature (Díaz-Morales, 2006; Shores & Scott, 2007; Zimbardo & Boyd, 1999). The lack of a precise definition of TP has stimulated the development of multiple scales with a single temporal category or two different time frames, although most authors have provided a definition of TP consisting of three temporal categories (Table 1). For example, Lennings (1996) highlighted the cognitive, affective, and conative aspects of the construct and defined 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). As many definitions of TP have included three temporal categories (past, present, and future), we consider that an adequate measurement instrument for the assessment of TP should consider at least these three time frames. The ZTPI, which was developed by Zimbardo and Boyd to solve the shortcomings of previous scales (i.e., low reliability, unstable factor structure, and scoring difficulties), has five dimensions: past-negative, past-positive, pres-

ent-fatalistic, present-hedonistic, and future. The ZTPI has good psychometric properties and it has been used to predict different behavioural and personal features for more than a decade (Boniwell et al., 2010).

 Table 1

 Time Perspective Scales

Scale – Authors (year)	Tem	poral catego	ories
	Past	Present	Future
Time Competence Scale – Shostrom (1964)	X	X	X
Time Reference Inventory – Roos & Albers (1965a, 1965b)	X	X	X
Thematic Apperception Test – Wohlford (1966)			X
Circles Test – Cottle (1967)	X	X	X
Experimental Inventory – Cottle (1968)	X (a)	X	X (a)
Time Attitude Scale – Nuttin (1985)	X	X	X
Sensation Seeking Scale – Zuckerman, Eysenck, & Eysenck (1978)		X	
Time Structured Questionnaire – Bond & Feather (1988)		X	
Time Lines – Rappaport (1990)	X		X
Stanford Time Perspective Inventory – Zimbardo (1990)	X	X (b)	X
Consideration of Future Consequences Scale – Strathman, Gleicher,			X
Boninger, & Edwuards (1994)			
Future Anxiety Scale – Zaleski (1996)			X
Zimbardo Time Perspective Inventory – Zimbardo & Boyd (1999)	X (c)	X (c)	X
Chetthamrongchai & Davies (2000)	X	X	X
Time Styles Scale – Usunier & Valette-Florence (2007)	X		X
Consideration of Future Consequences–14 Scale – Joireman, Shaffer, Balliet, & Strathman (2012)			X (d)

Notes: (a) double past and future: near and distant; (b) double present: hedonistic and fatalistic; (c) double past: negative and positive; double present: hedonistic and fatalistic; (d) double future: CFC-future and CFC-immediate.

Table 2 shows the main features of the five TPs, based on several studies (Boniwell & Zimbardo, 2004; D'Alessio, Guarino, De Pascalis, & Zimbardo, 2003; Zimbardo & Boyd, 1999). The past-negative perspective reflects "a pessimistic, negative, or aversive attitude toward the past" (Zimbardo & Boyd, 1999, p. 1277), presenting "a potentially disturbing portrait" (Zimbardo & Boyd, 1999, p. 1281). The past-positive perspective is related to a "nostalgic, positive construction of the past" (Zimbardo & Boyd, 1999, p. 1278). One common feature of both people with strong past-negative and past-positive TPs is that they tend to act in response to recurrent situations that reflect their past experiences (D'Alessio et al., 2003). People with a strong present-fatalistic orientation tend to believe "that the future is predestined and uninfluenced by individual actions, whereas the present must be borne with resignation" (Zimbardo & Boyd, 1999, p. 1278) since "they tend to see themselves as puppets in the hands of fate" (D'Alessio et al., 2003, p. 337). People with a strong present-hedonistic perspective tend to be oriented towards "present pleasure with little concern for future consequences" (Zimbardo & Boyd, 1999, p. 1275). Individuals with dominant present-fatalistic or presenthedonistic TPs have high levels of self-monitoring, and they are therefore presumed to be able to adapt and feel secure in different surroundings (Öner, 2002). Finally, people with strong future orientations tend to strive "for future goals and rewards" (Zimbardo & Boyd, 1999, p. 1275) and place an emphasis on planning (Shell & Husman, 2001).

 Table 2

 Time Perspective Dimensions and Features

Dimension	Features
Past-negative	Depression, anxiety, unhappiness, low self-esteem, aggression, shyness, temperament, anger,
	conservatism, caution, avoidance of changes and new experiences
Past-positive	Self-esteem, friendliness, energy, nostalgia, happiness, without past regrets, warmth, pleasure,
	sentimentalism, conservatism, caution, avoidance of changes and new experiences
Present-fatalistic	Aggression, depression, hopelessness, anxiety, anger
Present-hedonistic	Ego under-control, novelty seeking, sensation seeking, energy, impulsiveness, passion
Future	Conscientiousness, hard-working, energy, impulse control, innovation, reward seeking

Source: Boniwell and Zimbardo (2004); D'Alessio et al. (2003); Zimbardo and Boyd (1999).

In addition to the five dimensions included in the ZTPI, it is worth noting that other TPs have also been suggested in the literature. Boyd and Zimbardo (1997) proposed the transcendental-future perspective as an orientation that is related to a concern about the consequences of present behaviour after death. A future-negative perspective has also been identified, which involves worrying about the future, anticipating negative outcomes, and results in a poor ability to enjoy the present (Carelli, Wiberg, & Wiberg, 2011; Wiberg, Sircova, Wiberg, & Carelli, 2012). These qualitatively different versions of the future are not included in the ZTPI. Nevertheless, the ZTPI is currently the most suitable instrument for measuring individuals' TPs owing to its superior psychometric properties (Boniwell et al., 2010).

#### **Balanced Time Perspective**

TPs measure people's propensity to have each type of time orientation and shape individuals' thoughts, feelings, and actions. Nevertheless, people who are, for example, predominantly present oriented could also think about their past or future. In their study, Zimbardo and Boyd (1999) suggested that individuals who have a simultaneous bias toward different temporal frames have a BTP, which is the state and the ongoing process of being capable of operating in a temporal mode that is appropriate to the situation in which they find themselves. According to Zimbardo (2002), in an optimal BTP, the past, present and future components "blend and flexibly engage, depending on a situation's demands and our needs and values" (para. 5). People with a BTP have a positive attitude towards their past, enjoy the present, and focus on future goals (Zimbardo & Boyd, 1999). For example, students with a BTP may thus focus intensively on studying to achieve excellent marks in their exams, on celebrating intensively the end of these exams, and on enjoying themselves during family events. They choose to work hard when it is time to work, enjoy themselves when it is time for celebrations, and to be close to their families when it is a family moment (Boniwell & Zimbardo, 2003). It is supposed that they are able to switch among different TPs depending on task features, situational considerations, and personal resources (Zimbardo & Boyd, 1999).

People with a BTP therefore score higher on past-positive, future, and present-hedonistic TPs, but lower on past-negative and present-fatalistic TPs (Drake et al., 2008). This is the more functional or ideal profile, with low scores on dysfunctional orientations (past-negative and present-fatalistic), high scores on the functional orientations (past-positive and future), and a moderate score on the remaining present-hedonistic orientation (Boniwell & Zimbardo, 2004; Sircova et al., 2014). Although the theoretical concept of BTP has been presented as an optimal TP by a number of authors (Boniwell & Zimbardo, 2003, 2004; Zimbardo, 2002), the empirical

studies on BTP are recent and few in number. Empirical research in this field has focused almost entirely on the approaches used to operationalize BTP on the one hand, and the relationship between having a BTP and subjective well-being on the other (Boniwell et al., 2010; Drake et al., 2008; Stolarski, Bitner, & Zimbardo, 2011; Webster, 2011; Wiberg et al., 2012).

Five approaches with which to operationalize BTP have been applied in previous studies: (1) the cut-off-point method (Drake et al., 2008), which categorised individuals with a BTP as being those who scored above the 33rd percentile on past-positive, future, and present-hedonistic TPs, and below the 33rd percentile on past-negative and present-fatalistic TPs. This method was also proposed by Boniwell (2005), but she used the 50th percentile as the cut-off-point; (2) the person-oriented approach proposed by Boniwell et al. (2010), which suggested using a hierarchical cluster analysis in order to discover TP profiles and individuals with a BTP. In two samples of British and Russian university students, these authors found that the BTP group represented 23% and 10% of these samples, respectively. More recently, Gao (2013) applied this approach and found that the percentage of individuals with a BTP in a sample of Taiwanese university students was nearly 60%; (3) the deviation from a Balanced Time Perspective (DBTP) method (Stolarski et al., 2011), in which each individual received a score for their distance from the optimal TP profile as stated by Zimbardo and Boyd (2008). Stolarski et al. (2011) defined the optimal value of each TP as a score of 1.95 on past-negative, 4.60 on past-positive, 1.50 on present-fatalistic, 3.90 on present-hedonistic, and 4.00 on future; (4) the Balanced Time Perspective Scale (BTPS), which was proposed by Webster (2011) to measure BTP directly, rather than using the scores of the five ZPTI subscales as the other authors did; and (5) the approach of the level of balance introduced by Wiberg et al. (2012), which classified individuals as having different levels of BTP.

These approaches that have operationalized BTP have used different analytic strategies, but none have been widely accepted (for a more detailed review, see Wiberg et al., 2012; Zhang, Howell, & Stolarski, 2013). However, regardless of the approach used, there is considerable consensus that BTP have a positive impact on subjective well-being. These studies have associated having a BTP with higher: (1) subjective happiness and mindfulness (Drake et al., 2008); (2) satisfaction with life, purpose in life, and optimism (Boniwell et al., 2010); (3) emotional intelligence (Stolarski et al., 2011); (4) happiness and self-esteem (Webster, 2011); and (5) satisfaction with life, subjective happiness, positive affect, psychological needs satisfaction, self-determination, vitality, and gratitude (Zhang et al., 2013).

## **Time Perspective and Leisure Choices**

Boniwell and Zimbardo (2004) emphasised that TP was one of the most powerful influences on almost all aspects of human behaviour. Paradoxically, only a few studies have investigated the effects of TP on leisure choices: the amount of free time available (Shores, 2005), benefits sought (Shores & Scott, 2007), and activities (Cotte & Ratneshwar, 2003; Philipp, 1992). Furthermore, most research linking TP and leisure has been based on small sample sizes, with the sole exception of the study by Shores and Scott.

Considering the circumstances described above, it would appear that a theoretical framework is needed to better understand the role of TP in leisure choices. From a broader perspective, a conceptual framework with which to describe factors that influence leisure choices is the social ecological model (McLeroy, Bibeau, Steckler, & Glanz, 1988), which is a variation of the ecological model proposed by Bronfenbrenner (1977). This model has been adopted for the study of participation in different leisure activities (Rowe, Shilbury, Ferkins, & Hinckson, 2013; Shores & West, 2008). McLeroy et al. (1988) proposed that behaviour (the outcome of interest) is influenced by intrapersonal factors (i.e., characteristics of the individual), interpersonal process-

es and primary groups (i.e., social factors), institutional factors, community factors, and policies. Although leisure choices are continuously and simultaneously influenced by the aforementioned factors (Shores & West, 2008), the objective of our research has led us to focus our attention on intrapersonal factors in which TP is viewed as an important aspect of the individual's personality (Davies & Omer, 1996; Shores, 2005).

If we focus our attention on TP, Davies and Omer (1996) proposed a time allocation model that explicitly recognised the influence of TP on the amount of time spent on leisure (in the *inter-activity* process) and the time allocated to different leisure activities (in the *intro-activity* process). These authors pointed out that, in the inter-activity process, the amount of time spent on each of the three major blocks or activity types (paid work, non-discretionary time, and discretionary time) is determined by both exogenous variables or contextual factors (e.g., culture, social structure, economic situation, legislation, etc.) and endogenous variables or factors specific to the individual (e.g., age, sex, TP as an important aspect of overall personality, etc.). In what they labelled as the intro-activity allocation process, time is allocated and reallocated to different activities within each activity type in the same way as above. Lastly, the outcomes of both processes are evaluated, particularly in terms of satisfaction, and this evaluation is another input to the allocation process.

Bergadaà (1990) introduced an alternative theoretical model in which TP leads to different motivations, plans, and types of products and services purchased. TP also influences individuals' attitudes and how they organise and choose products/services. More specifically, and based on a qualitative study, this author described the differences between present and future orientation as regards two products related to leisure: holidays and books. Present-oriented people prefer package holidays and reading books for relaxation, whereas future-oriented individuals have a greater preference for self-organised trips designed to provide enriching experiences, and they read informative books (Bergadaà, 1990). Similarly, Martin, Gnoth, and Strong (2009) suggested that both future-oriented and present-oriented people could read magazines. However, future-oriented people could read magazines that discuss issues such as investments and retirement incomes (e.g., Fortune), while present-oriented people, who tend to engage in sensation-seeking behaviours, could read magazines that highlight exciting leisure activities (Martin et al., 2009). It can consequently be argued that TP does not necessarily determine participation/non-participation in leisure activities, but rather the content of the activities.

More recently, Cotte and Ratneshwar (2003) proposed a theoretical approach with which to examine how *timestyle* influences the choice of leisure goals, and impacts on people's decisions regarding leisure products, services and activities. These authors suggested that an individual's timestyle has four dimensions: social orientation, temporal orientation, planning orientation, and polychronic orientation. The objective of our research has led us to focus our attention on temporal orientation (the relative significance of past, present or future) or TP, as we have called it. Cotte and Ratneshwar (2003) concluded that TP appears to influence not only day-to-day leisure activities but also more major leisure consumption decisions. These researchers concluded that past-oriented people concentrate on activities such as visiting the neighbourhoods in which they grew up and talking to old friends on the phone. Present-oriented people's leisure choices are more likely to be based on hedonic pursuits (e.g., casino gambling, shopping, playing on the Internet, going out with friends or family for dinner). Future-oriented individuals often take part in personal development activities such as cookery classes, golf classes, or poetry discussion groups.

The theoretical models and qualitative studies reviewed above (Bergadaà, 1990; Cotte & Ratneshwar, 2003; Davies & Omer, 1996) allowed us to formulate the following propositions (Figure 1):

Proposition 1: TPs will be associated with differences in the amount of free time available.

Proposition 2: TPs will be associated with differences in the leisure benefits sought.

Proposition 3: TPs will predict how often people spend time on different leisure activities.

Proposition 4: BTP and non-BTP groups differ with regard to the (a) amount of free time available, (b) leisure benefits sought, and (c) frequency of participation in different leisure activities.

Surprisingly, few quantitative studies have examined the impact of TP on leisure choices. Although there is little empirical evidence regarding the aforementioned propositions, the main findings of previous quantitative studies concerning each one of them are described in more detail below.

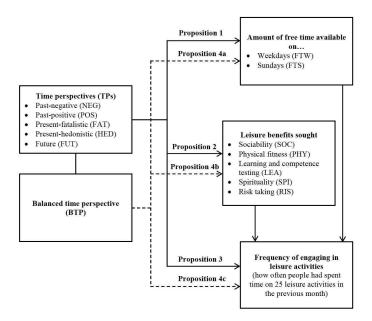


Figure 1. Research Propositions

The first proposition states the relationship between the five TPs and the amount of free time available. Shores (2005), who introduced the social psychological concept of TP to leisure studies, hypothesised that TPs may have significant relationships with the amount of residual time (defined as time not spent at work) and the time allocated to leisure. In a study of 148 undergraduate students, significant differences were observed in the percentage of residual time allocated to leisure for respondents with different TPs. What is more, present-fatalistic and present-hedonistic individuals averaged more than twice the amount of recreation time than future-oriented respondents (Shores, 2005).

The second proposition states the relationship between the five TPs and the leisure benefits sought. The answer to the question, "why do people engage in leisure activities?" has motivated a great deal of research in leisure studies (for a more detailed review, see Dillard & Bates, 2011). More specifically, leisure studies have described how internal attributes (inputs) are related to the personal benefits that individuals seek and acquire (outputs; Shores & Scott, 2007). However, there is little systematic and comprehensive research on this topic (Barnett, 2013; Shores & Scott, 2007). One of these internal attributes is personality. Barnett found that the facets of the Big Five personality dimensions (neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness) were predictive of six desired outcomes (new experiences, challenges and skills, internal rewards, social interaction, feel good, and active engagement).

With regard to the relationship between TP as an important influence on overall personality and the leisure benefits sought, the only empirical research to have been conducted on this specific issue is that by Shores and Scott. These authors selected six benefit domains (family togetherness, physical fitness, learning, competence testing, spirituality, and risk taking), which provided information about the desired outcomes related to sociability, achievement, and psychological state goals. These benefit domains were the only ones for which a theoretical basis existed in TP literature (Shores & Scott, 2007). These authors' two key findings were as follows. First, they showed that the influence of TP on leisure benefits was more important than sociodemographic variables. Second, for the six leisure benefits, past-negative and present-fatalistic people were those who were least likely to describe any benefit as important, whereas respondents classified as future-oriented and past-positive attributed the highest level of importance to all leisure benefits sought except risk taking. Shores and Scott therefore concluded that "past-positive and future time perspectives are good and healthy time perspectives for shaping our free time" (p. 98).

The third proposition establishes the relationship between the five TPs and the frequency of participation in different leisure activities. Philipp found that TPs are associated with participation in leisure activities. The Experimental Inventory used by Cottle (1968) was used as a basis to assess five time orientations (i.e., distant past, near past, present, near future, and distant future), and 149 respondents were asked to report whether they had participated in each of 39 leisure activities during the previous year. Philipp reported that 15 of the 39 activities (38%) were significantly associated with one or more time orientations. Seven of the leisure activities (camping, going to bars/nightclubs, going to movies, going to concerts, reading a newspaper, reading for pleasure, and swimming) were associated with a past orientation (composed of distant past and near past), whereas the only two activities related to present orientation were going to amusement parks and going to zoos. Nine activities (driving off-road vehicles, fishing, going to bars/nightclubs, going to concerts, horseback riding, playing indoor sports, playing outdoor sports, swimming, and watching sporting events) were linked to a future time orientation. This was why Philipp concluded that future-oriented people "appear to seek many specific leisure activities much more frequently than those individuals with a past or present time orientation" (p. 663).

No other empirical studies have been found that have examined the relationship between TPs and a wide range of leisure activities, although there are studies in which a single leisure activity has been reported (Epel, Bandura, & Zimbardo, 1999; Karande & Merchant, 2012; Lukavska, 2012). For instance, Epel et al. (1999) reported that the future orientation of homeless adults living in shelters (N = 82) was related to less time spent watching TV and passing time, whereas the present orientation was related to more time spent on these activities. In a study of 306 undergraduate students, Karande and Merchant found that present time orientation influenced

impulsiveness, and that the latter affected the individual's recreational shopper identity, which in turn influenced shopping behaviour (i.e., browsing, socialising, shopping frequency, number of stores shopped at, time spent shopping, and dollars spent). TPs even predicted the extent to which 154 respondents spent their time playing online games (Lukavska, 2012): a significant negative correlation was found between future TP and the amount of time spent on this activity.

The fourth proposition suggests differences in leisure choices between BTP and non-BTP groups. As noted in the section above, most previous research into BTP has focused on its influence on well-being. This paper is in fact the first to link BTP to the amount of free time available, benefits sought, and leisure activities. Nevertheless, research in the field of positive psychology (Boniwell, 2012) has provided support for the key role of a BTP in the ability to use leisure time in a positive and healthy way. Boniwell and Zimbardo (2003) pointed out that a BTP is related to the way in which people use their time and is useful for solving the dilemmas of work-leisure balance. As Boniwell (2012) clarified, "a balanced use of time does not mean equal allocation of time to work and leisure, it does not even necessarily mean investing more time into leisure" (p. 80). It is a matter of quality rather than quantity. Individuals with a BTP seek quality leisure experiences, rather than more free time. Furthermore, it seems clear that a satisfying use of leisure time is characteristic of a balance in our TP (Boniwell & Zimbardo, 2003). On the one hand, people with a BTP have the ability to be flexible in shifting from one TP to another and are capable of adopting a TP that is appropriate to the situation in which they find themselves (Boniwell, 2012; Boniwell & Zimbardo, 2003). This ability allows them to be fully involved in the leisure activities in which they engage and, most importantly, to identify the potential benefits of each activity. On the other hand, individuals with a BTP additionally make the most of their leisure time (Boniwell & Zimbardo, 2003) and may spend less time on passive entertainment or boring activities.

#### Method

## **Data Collection and Sample Profile**

A total of 374 undergraduate and master's degree students from the University of Castilla-La Mancha (UCLM) answered a questionnaire about TP and leisure in December 2013. The UCLM is a Spanish public university with more than 31,000 students. The questionnaire was administered online. The average duration of the survey was 17 minutes. After deleting incomplete cases, we retained 320 usable questionnaires for data analysis.

The average age of the participants was 22.28 years (SD = 3.67). The distribution by sex was 57.19% females and 42.81% males. The majority (86.25%) were undergraduate students, while 13.75% were master's degree students. A small proportion of the sample (16.25%) performed paid work. Nearly 65% reported that they lived in the family home. Over 75% of the respondents resided in an urban area. The average family size was 4.03 members (SD = 1.07), and the monthly family income per capita was, on average, 387.68 € (SD = 287.29).

#### Instruments

The questionnaire consisted of three sections. The first section included 20 items derived from the ZTPI (Zimbardo & Boyd, 1999). The ZTPI is a reliable and valid measure of five TPs: past-negative, past-positive, present-fatalistic, present-hedonistic, and future (Sircova et al., 2014). The original ZTPI consisted of 56 items, but we decided to use a shortened version of 20 items (four for each TP) based on the results (i.e., items with the highest factor loadings) of a previous study conducted in Spain (Díaz-Morales, 2006). A 5-point Likert type scale was used,

ranging from *strongly disagree* (1) to *strongly agree* (5). The second section was dedicated to leisure choices: the amount of free time available, benefits sought, and activities. Two questions were about the amount of free time available on weekdays and Sundays (hours), respectively, referring more specifically to the time that had been available the previous week. The leisure benefits sought were measured using 15 items on a 5-point Likert type scale ranging from *not at all important* (1) to *very important* (5). We used 14 items from Shores and Scott and added an additional item from Barnett elated to sociability: "be with my friends." The respondents also reported how often they had spent time on 25 leisure activities during the previous month. The choice of these leisure activities was based on the studies conducted by Rodríguez and Agulló (1999) and von Normann (2009). A pilot test with 20 undergraduate students further confirmed the appropriateness of the activities selected. The response options were *never* (1), *once a month* (2), *more than once a month but less than once a week* (3), *once a week* (4), *more than once a week but less than once a day* (5), and *daily or almost daily* (6). The last section was designed to obtain socio-demographic information (i.e., age, sex, education level, paid work, living in the family home, family size, and family income).

## **Data Analysis**

Two confirmatory factor analyses (CFA) of the TPs and leisure benefits sought scales were conducted using EQS 6.1 for Windows. Stepwise hierarchical regression analyses were then used to evaluate the relationship between the five TPs and the amount of free time available (Proposition 1) on the one hand, and the leisure benefits sought (Proposition 2) on the other. Exogenous variables were entered hierarchically in two blocks: control variables (block 1), and TPs (block 2). The impact of TPs on each leisure activity (Proposition 3) was examined using ordinal regression analyses in which leisure benefits sought, amount of free time available on weekdays and Sundays and significant control variables were also included. Five different link functions (cauchit, complementary log-log, logit, negative log-log, and probit) can be used to obtain a set of candidate models. There is no general method that can be used to choose the proper link function. We used the test of parallel lines and the goodness-of-fit to monitor the candidate models and choose those that would be most appropriate, as suggested by Khan and Almas (2013).

With regard to the relationship between a BTP and leisure choices (Proposition 4), five approaches can be used to operationalize BTP, as noted in our literature review. We performed a cluster-analysis to operationalize the BTP using the standardised scores of the five ZTPI subscales, as proposed by Boniwell et al. (2010). We used Latent Gold\* 4.5 to perform a latent class cluster analysis (LCCA). The differences between BTP and non-BTP groups as regards the amount of free time available and the leisure benefits sought (Propositions 4a and 4b, respectively) were analysed using *t*-tests, whereas the differences in how often the respondents had spent time on 25 leisure activities (Proposition 4c) were conducted using Mann-Whitney U tests. All regression and bivariate analyses were performed with IBM\* SPSS\* Statistics 19.0.

#### Results

#### Confirmatory Factor Analyses: Time Perspectives and Leisure Benefits Sought

As a starting point, the 20 items from the shortened version of the ZTPI were subjected to a CFA in order to assess the adequacy of the five-factor model: past-negative, past-positive, present-fatalistic, present-hedonistic, and future. Three items ("POS3. I get nostalgic about my child-hood," "FAT4. Often luck pays off better than hard work," and "HED4. I try to live my life as fully as possible, one day at a time") were deleted owing to low standardised loadings (.42, .28, and .32,

respectively). Having made these corrections, the overall model fit was adequate (Schumacker & Lomax, 2010): Satorra-Bentler scaled chi-square = 144.22, df = 109, p = .01 with Bentler-Bonett normed fit index (BBNFI) = .90, Bentler-Bonett non-normed fit index (BBNNFI) = .97, comparative fit index (CFI) = .97, incremental fit index (IFI) = .97, McDonald's fit index (MFI) = .95, root mean-square error of approximation (RMSEA) = .03. Regarding reliability, the ordinal alpha (O- $\alpha$ ), recommended by Gadermann, Guhn, and Zumbo (2012) for Likert-type items with 2 to 7 response options, ranged from .74 for past-positive to .84 for present-hedonistic, while the composite reliability (CR) values exceeded the threshold of .70 (Nunnally & Bernstein, 1994). All loadings were significant (p < .001) and above .60. Average variance extracted (AVE) values greater than or close to .50 indicated sufficient convergent validity (Fornell & Larcker, 1981). Moreover, the AVE for each construct was higher than the squared correlations for all pairs of constructs (Fornell & Larcker, 1981) and discriminant validity was thus ensured.

A CFA for the leisure benefits sought scale allowed us to group 15 items into five benefit domains: sociability, physical fitness, learning and competence testing, spirituality, and risk taking. This factor structure was very similar to that identified by Shores and Scott, except for the fact that these authors examined learning and competence testing as two distinct domains, whereas we grouped them into a single construct owing to their high correlation. The results from the CFA indicated an acceptable fit for the five-factor model (Satorra-Bentler scaled chi-square = 197.13, df = 80, p < .001 with BBNFI = .92, BBNNFI = .93, CFI = .95, IFI = .95, MFI = .83, RMSEA = .07), adequate reliability levels, and satisfactory convergent and discriminant validity.

The scores for the five TPs and leisure benefits sought were calculated as weighted arithmetic means for the subsequent analyses, in which the weights were the standardised loadings derived from the previous CFA.

## Relationship Between Time Perspectives and the Amount of Free Time Available

Table 3 shows the outcomes of the two stepwise hierarchical regression analyses used to determine the proportions of variance in the amount of free time available on weekdays and Sundays explained by the TPs and control variables. After controlling for socio-demographic characteristics, future orientation had negative impacts on the leisure time available on weekdays and Sundays, while the present-hedonistic perspective had a positive effect on the amount of hours spent participating in leisure activities on weekdays. No significant effects were observed for the other TPs examined (i.e., past-negative, past-positive, and present-fatalistic).

#### Relationship Between Time Perspectives and Leisure Benefits Sought

As explained earlier, the significant control variables were entered in the regression equations in the first block and TPs were added in the second block. The coefficients of determination indicated that for four of the five leisure benefits sought, with the exception of spirituality, more than 10% of the variance was explained. Neither past-negative nor present-fatalistic were associated with the five leisure benefits sought. The past-positive perspective had positive impacts on sociability and learning and competence testing. Respondents who scored high on the present-hedonistic perspective were more likely to seek risk taking benefits and less likely to seek learning and competence testing benefits from leisure. Future TP had positive effects on learning and competence testing, physical fitness, sociability, and spirituality (Table 4).

**Table 3**Stepwise Hierarchical Regression Analysis Predicting the Amount of Free Time Available

Block/Exogenous variable	Amount of free	e time available on	Amount of free	time available on
	we	ekdays	Sun	days
	$\Delta R^2$	Standardised	$\Delta R^2$	<i>b</i> *
		coefficients (b*)		
Block 1. Control variables	.09***		.03**	
$Sex (1 = female)^{d}$		15**		
Paid work $(1 = yes)^d$		21***		13*
Family size		$.09^{\dagger}$		
Family income per capita				11 <sup>†</sup>
Block 2. Time perspectives	.07***		.05***	
Past-negative				
Past-positive				
Present-fatalistic				
Present-hedonistic		$.10^{\dagger}$		
Future		23***		21***
Total R <sup>2</sup>	.16		.08	
F	12.21***		8.63***	

Notes:  $^{T}p < .1$ ;  $^{*}p < .05$ ;  $^{**}p < .01$ ;  $^{***}p < .001$ ;  $^{a}$ Dummy variable.

## Relationship Between Time Perspectives and Leisure Activities

Ordinal regression analyses were used to explore how TPs predicted how often people had spent time on each leisure activity during the previous month. Leisure benefits sought, amount of free time available on weekdays and Sundays, and significant control variables were also included in the ordinal regression models. The test of parallel lines was nonsignificant (p > .05) in the models discussed below, indicating that the location parameters are equivalent across the levels of the dependent variable (Table 5). When assessing model fit, the Pearson and deviance statistics (p > .05) indicated a good fit to the data. Unfortunately, both goodness-of-fit statistics should be viewed with great caution. They are sensitive to empty cells when estimating models with continuous covariates, as in our case. The Nagelkerke pseudo  $R^2$ , which appears to best exhibit palindromic invariance (Smith & McKenna, 2012), was accordingly used to evaluate goodness-of-fit for our models. The Nagelkerke  $R^2$  values for the 25 models ranged from .04 (for travel and tourism, and going for a walk) to .47 (for sports). Although these values were suitable for an exploratory study, the Nagelkerke  $R^2$  was below 10% in seven activities, indicating that the predictors did not explain much of the variance in these activities.

Table 6 shows the model parameter estimates. The nonsignificant parameters and coefficients for significant control variables have been omitted for brevity, but are available upon request. As can be seen in columns 1-6, 23 of the 25 leisure activities were significantly associated with one or more TPs. Ten of these 23 activities (reading comics, shopping, nightlife, watching TV, surfing the Internet, listening to the radio and music, using social networks, attending concerts, attending sporting events, and going to the cinema) were significantly associated with more than one TP. Past perspectives (i.e., past-negative and past-positive) played different roles as regards how often certain activities had been performed in the previous month. The past-negative perspective had negative impacts on reading comics, shopping, and nightlife; whereas the past-positive orientation was significantly and positively associated with reading comics, watching TV, reading books, surfing the Internet, listening to the radio and music, and talking on the phone and using instant messaging services. The present-fatalistic perspective was asso-

Table 4

Stepwise Hierarchical Regression Analysis Predicting Leisure Benefits Sought

Block Exogellous variable	зоставшту	шц	r nysicai muless	Huless	competence testing	e testing	эринаану	шу	NISK WRITE	S INTERIOR
	$\Delta R^2$	*	$\Delta R^2$	<i>b</i> *	$\Delta R^2$	<i>b</i> *	$\Delta R^2$	<i>b</i> *	$\Delta R^2$	<i>b</i> ,
Block 1. Control variables	.09***		.06***		.00		.06**	÷	.01*	
Age $Sex (1 = female)^{d}$		.13*		24***				.11*		.10*
Education level (1 =		17***						.10*		
Master's degree) <sup>d</sup>										
Living in family home $(1 =$								10 <sup>†</sup>		
yes) <sup>d</sup>										
Family size				.15**						
Block 2. Time perspectives	.14***		.05***		.12***		.01*		.23***	
Past-negative										
Past-positive		.36***				.12*				
Present-fatalistic										
Present-hedonistic						15**				.47***
Future		.11*		.22***		.30***		.11*		
Total $R^2$	.23		.11		.12		.07		.24	
F	22.97***		13.09***		14.20***		4.62***		48.69***	

 Table 5

 Ordinal Regression Analysis Predicting Frequency of Engagine in Leisure Activities: Test of Parallel Lines and Goodness-of-Fit

Leisure activity	Test of parallel	lines	Nagelkerke
<u>-</u>	$\chi^2(df)$	р	pseudo $R^2$
Reading comics (d)	7.24 (52)	1.00	.26
Shopping (c)	37.29 (48)	.87	.11
Nightlife (e)	68.49 (52)	.06	.18
Watching TV (b)	63.74 (48)	.06	.12
Reading books (printed or eBooks) (c)	51.73 (44)	.20	.07
Surfing the Internet (b)	38.08 (44)	.72	.11
Listening to the radio and music (c)	51.29 (40)	.11	.08
Talking on the phone and using instant messaging services (b)	45.01 (36)	.14	.17
Using social networks (b)	58.14 (48)	.15	.12
Sports (c)	52.41 (52)	.46	.47
Travel and tourism (e)	22.87 (44)	1.00	.04
Attending concerts (d)	23.91 (44)	.99	.13
Attending sporting events (d)	54.43 (52)	.38	.20
Playing a musical instrument (d)	21.55 (48)	1.00	.13
Attending the theatre or similar activities (c)	56.60 (44)	.10	.14
Collaborating with associations (e)	12.67 (44)	1.00	.09
Going to the cinema (d)	27.96 (42)	.95	.12
Going for a walk (a)	60.07 (44)	.05	.04
Watching online videos (c)	55.87 (52)	.33	.16
Resting and time out (c)	50.41 (44)	.23	.13
Playing video games or online games (c)	59.36 (48)	.13	.16
Going out for a drink (e)	64.67 (48)	.05	.06
Reading newspapers and magazines (printed or online) (b)	45.59 (48)	.57	.14
Going to restaurants (e)	44.60 (48)	.61	.06
Visiting museums and art galleries (d)	27.65 (52)	1.00	.20

Notes: Link function: (a) cauchit; (b) complementary log-log; (c) logit; (d) negative log-log; (e) probit.

ciated with eight activities. It had an inverse relationship with surfing the Internet, using social networks, and sports; and a direct relationship with watching TV, travel and tourism, attending concerts, attending sporting events, and playing a musical instrument. Mixed (positive and negative) results were similarly found for the relationship between the present-hedonistic perspective and nine leisure activities. This perspective had a positive relationship with shopping, watching TV, using social networks, going for a walk, and watching online videos; and a negative relationship with attending concerts, attending the theatre or similar activities, collaborating with associations, and going to the cinema. The future TP was negatively associated with eight activities (shopping, nightlife, listening to the radio and music, attending sporting events, going to the cinema, resting and time out, playing video games or online games, and going out for a drink) and positively associated with reading newspapers and magazines.

Although it was not the objective of our study, Table 6 also provides evidence regarding the extent to which there was a relationship between each benefit sought and leisure activity (columns 7-11). With regard to the significant control variables (columns 12 and 13), we can highlight that sex was significantly associated with 11 leisure activities. Being female was associated with a higher propensity to participate in activities such as shopping, talking on the phone and using instant messaging services, and using social networks; while being male was related to reading comics, nightlife, sports, attending sporting events, playing a musical instrument,

**Table 6**Ordinal Regression Analyses Predicting Frequency of Engaging in Leisure Activities: Parameter Estimates

	Leisure activity							Exogen	Exogenous variable	ble			
NEG POS FAT HED FUT SOC PHY LEA SPI RIS Parameter  Omnics			Tin	ne perspec	tives			Leisure	bene fits	sought		Significant contro	l variables $(p < .1)$
omics44* .49*59*69† .83***    -21†		NEG	POS	FAT	HED	FUT	SOC	PHY	LEA	SPI	RIS	Positive	Negative
TV	Reading comics	44*	.49*						69†	.83***		•	Female; Home;
TV -21† .25† .27* .25* .27* .35* .12* Female element or eBooks) .32* .25† .27* .24* .32* .30** Home; FTS ooks (printed or eBooks) .32* .25† .27* .25** .34* .30** Home; FTS of a line phone and using instant .75** gall networks .25† .27† .53** .37* .30** Female gang services all networks .25† .27† .14** .52* .23† .13† .14** .52* .27* .37** .40*** Female; FTS it tourism the theatre or similar activities ing with associations he cinema a walk of on dine out doe games or online games of a drink of a condine) estaurants and art galleries work, Income lessurants userums and art galleries work; Income lessurants suscurism and art galleries work; Income lessurants and art galleries work; Income lessurants work; Income lessurants are condined as a condine work; Income lessurants are condined as a condined as a condine work; Income lessurants are condined as a condined as a condine work; Income lessurants are condined as a condined as a condine work; Income lessurants are condined as a condined as a condine work; Income lessurants are condined as a condined as a condine work; Income lessurants are condined as a condined as	•												Income
TV	Shopping	21			.42**	29†	35*					Female	Size
TY	Nightlife	14†				25**				12*		FTS	Age; Female
Proceded	Watching TV		.25†	.27*	.24†					30**		Home; FTS	
sp the Internet and music ng to the radio and music ng to the radio and music ng to the phone and using instant	Reading books (printed or eBooks)		.32*					29*	.34 <sup>†</sup>			Work	
ng to the radio and music  9.0 (the phone and using instant)  1.75**  1.27*  2.27*  2.27*  2.27*  2.27*  2.27*  2.27*  2.27*  2.28*  2.28*  2.28*  2.28*  2.29*  2.28*  2.29*  2.21*  2.28*  2.21*  2.28*  2.21*  2.	Surfing the Internet		4	-31*			37		.58*		40*		FTS
Son the phone and using instant   .75**   Female   Female   Sosial networks   .25†	Listening to the radio and music		.46*			53**				30*			
ssaging services        25†         .27†        38**         Female; FTS           social networks        23†         1.47****        52*         FTS           and tourism         1.14*        19*        24*         1.12*         Work           ing concerts         1.4*        19*        27**         3.7**         .40***        24*         1.2*           ing sporting events         2.0*        42*         4.8***         Work         Income           ing the theatre or similar activities        42*         4.8***         Work         Income           orating with associations        25*         2.5*         2.1**         Work: Home           for a walk        25*         2.2*         Work: Home         1.6***           for a walk end in evideos         2.1*         2.2*         2.5*         Size           and time out         3.0*        48**        29*         FTW           y and other contine games         2.1*        29*         FTS           y and other contine games        20*         Work        20*         Work           inted or online)        20*        20*         Work; Income        5*         Education; Inc	Talking on the phone and using instant		.75**									Female	FTW
Social networks   2.5t   2.7t   2.2t   2.2	messaging services												
and tourism and and and and and tourism and and and tourism and and and tourism and and and and tourism and and tourism and and and tourism and and tourism and and and tourism and and tourism and and tourism and and tourism and and and tourism and and tourism and and tourism and and and tourism and and tourism and and tourism and and and tourism and and and tourism and and and and tourism and and and and tourism and	Using social networks			25	.27					38**		Female; FTS	
vents	Sports			23				1.47***	52*			FTS	Female; FTW
14	Travel and tourism			.13								Work	
wents     20°     -37**     40***     FTS       strument     .43**     .42*     .88**     Work       e or similar activities    25*     .48***     Income       ssociations    25*     .28*     .21**     Work: Home       21†     .28*     .25*     Size       cos     .21*     .28*     .25*     Size       FTW     .30*     .43**     .29*     FTS       s or online games     .30*     .24**     .29*     FTS       k     .24**     .27*     .20*     Work       e)     .15*     Education; Income       ud art galleries     .66***     Work; Income	Attending concerts			.14†	19*				24	.12†			Size
strument .43** .42* .48** .48*** Income .25* .25* .25* .28* .21** .28* .25* .25* .25* .28* .25* .25* .28* .25* .25* .28* .25* .28* .25* .28* .25* .28* .25* .28* .25* .28* .29* .71* .28* .29* .71* .28* .29* .71* .71* .71* .71* .71* .71* .71* .71	Attending sporting events			.20†		37**	.37*	.40***				FTS	Female; FTW
2 or similar activities -4.2* .48*** Income .25* .21** Work; Home .21** Work; Home .21* .28* .21* .28* .21* .28* .21* .28* .25* .28* .25* .28* .25* .28* .25* .28* .25* .28* .25* .25* .28* .29* .78* .25* .25* .25* .25* .25* .25* .25* .25	Playing a musical instrument			.43**						.38*		Work	Female
25*   21**   28*   25*   28*   25*   25*   28*   25*	Attending the theatre or similar activities				42*					.48***		Income	
19	Collaborating with associations				25*					.21**			Home
21t .28t .25t Size cos .30t .48** .29* FTW rt soronline games .30t .29* FTS .20t FTS	Going to the cinema				19†	25*						Work; Home	Age; Size
eos .30° .48** .25° Size FTW FTS storonline games .30° .29* FTS FTS k .24** .27° .20* Work e) .15° Education; Income lad art galleries .66*** Work; Income	Going for a walk				.21†		.28†						Income
43**29* FTW s or online games30† FTS k24**27*20* Work e) .19† .27†20* Work e) .15† Education; Income	Watching online videos				.30†		48**				.25†	Size	Female; Home
or online games30° FTS k24**20* Work e) .19† .27†20* Work e) .15† Education, Income d art galleries .66*** Work; Income	Resting and time out					43**		29*				FTW	
k24** FTS and magazines .19† .27†20* Work e) d art galleries .66*** Work; Income	Playing video games or online games					30 <sup>†</sup>						FTS	Female
. and magazines .19' .27' -20* Work e) .15' Education; Income d art galleries .66*** Work; Income	Going out for a drink					24**						FTS	FTW
e) .15† Education; Income rd art galleries .66*** Work; Income	Reading newspapers and magazines					.19†			.27		20*	Work	Female
rd art galleries	(printed or online)												
nd art galleries .66*** Work; Income	Going to restaurants										.15†	Education; Income	
	Visiting museums and art galleries									.66***		Work; Income	Home

time available on weekdays; FTS: amount of free time available on Sundays. Master's degree); Work: paid work (1 = yes); Home: living in the family home (1 = yes); Size: family size; Income: family income per capita (6); FTW: amount of free sociability, PHY: physical fitness; LEA: learning and competence testing; SPI: spirituality; RIS: risk taking; Female: sex (1 = female); Education: education level (1 = Notes: p < .1; p < .05; p < .0; p < .0 watching online videos, playing video games, and reading newspapers and magazines. Similar interpretations can be made for living in the family home and paid work, family income, family size, age, and education level, which were related to six, five, four, two and one leisure activities, respectively. The amount of free time available on weekdays and Sundays influenced the frequency of participation in five and eight activities, respectively.

## Relationship Between a Balanced Time Perspective and Leisure Choice

We conducted a LCCA in order to identify groups with and without a BTP. Five models were considered, each of which incorporated between one (sample homogeneity) and five clusters. We selected the most parsimonious model according to the consistent Akaike information criterion (CAIC). The results indicated that there were two clusters. The first cluster (59.69%) was labelled as non-BTP and included individuals with high scores on past-negative and present-fatalistic perspectives (0.14 and 0.35 standard deviations over the sample mean, respectively). The second cluster (40.31%) was a BTP group that was characterised by high scores on future, past-positive and present-hedonistic subscales (0.92, 0.41, and 0.32 standard deviations over the sample mean, respectively), and low scores on past-negative and present fatalistic perspectives.

Each individual was assigned to a group according to his/her response pattern: 191 were individuals with a non-BTP and 129 had a BTP. Firstly, the BTP effects on the amount of free time available on weekdays and Sundays were evaluated using t-tests. The non-BTP group spent more time (p < .05) pursuing leisure activities on weekdays (4.89 hours on average) and Sundays (7.29 hours on average) than the BTP group (3.69 and 6.52 hours on average, respectively). Secondly, the scores obtained by the BTP group for four of the five leisure benefits sought were found to be significantly higher than those of the non-BTP group: sociability ( $M_{\text{non-BTP}} = 3.83$ ,  $M_{\mbox{\tiny RTP}} = 4.17, t = -4.31, p < .001);$  physical fitness ( $M_{\mbox{\tiny non-BTP}} = 3.52, M_{\mbox{\tiny BTP}} = 3.84, t = -2.85, p < .001);$ learning and competence testing ( $M_{\text{non-BTP}} = 3.98$ ,  $M_{\text{BTP}} = 4.27$ , t = -4.00, p < .001); and spirituality ( $M_{\text{non-BTP}} = 2.93$ ,  $M_{\text{BTP}} = 3.19$ , t = -2.11, p = .04). No significant differences were found in the case of risk taking ( $M_{\text{non-BTP}} = 3.46$ ,  $M_{\text{BTP}} = 3.43$ , t = 0.23, p = .82). Thirdly, the frequency with which the participants engaged in 22 of the 25 activities was similar in both groups. There were significant differences between the non-BTP and BTP groups as regards going out for a drink (Mann-Whitney U = 10,584.50, z = -2.21, p = .03), nightlife (Mann-Whitney U = 9489, z = -3.58, p < .001), and resting and time out (Mann-Whitney U = 9588, z = -3.46, p < .001). The non-BTP group engaged in these leisure activities more often than the BTP group did.

#### Discussion and Conclusions

This paper has provided a review of various theoretical models (Bergadaà, 1990; Cotte & Ratneshwar, 2003; Davies & Omer, 1996) in order to propose and test an integrated model that analyzes how TPs (past-negative, past-positive, present-fatalistic, present-hedonistic, and future) and having a BTP have an influence on the amount of free time available, the leisure benefits that individuals seek, and how often people spend time on different leisure activities. From an academic point of view, the findings of this study shed light on the role of TP in leisure choices, which is a relevant contribution when bearing in mind the scarcity of empirical research on this topic (Philipp, 1992; Shores, 2005; Shores & Scott, 2007). Moreover, to the best of our knowledge, this study is the first to link BTP to leisure choices, demonstrating how BTP can be applied in fields beyond positive psychology. The main conclusions obtained are as follows.

First, with regard to the relationship between TPs and the amount of free time available (Proposition 1), our findings are similar to those of Shores (2005). We can therefore conclude that the future TP is associated with less free time on both weekdays and Sundays. Previous studies have found that people with a strong future orientation are highly focused on reward seeking (Zimbardo & Boyd, 1999) and have attributes such as being hard-working and having a greater willingness to make short-term sacrifices for long-term benefit (Jung & McCormick, 2011). It is therefore probable that these people do not feel comfortable spending time in leisure activities that are not closely related to the success of their studies or career. The present-hedonistic perspective is, on the contrary, associated with more time spent on leisure activities on weekdays. One explanation for this is that people who have a strong present-hedonistic orientation are more focused on present pleasure (Zimbardo & Boyd, 1999). It is therefore probable that they do not fear that spending more time on leisure activities, which are more pleasurable than studying or working, will have negative consequences in the future.

With regard to the relationship between TPs and leisure benefits sought (Proposition 2), the results obtained have allowed us to conclude that TP is a key predictor of why people engage in leisure activities. It is possible to summarise the findings obtained as follows: past-positive TP is strongly associated with sociability; future TP is intensively related to physical fitness and learning and competence testing; and present-hedonistic TP is a key predictor of risk taking. These results are completely coherent with the features of each TP (Zimbardo & Boyd, 1999): pastpositive (friendliness); future (conscientiousness and reward seeking); and present-hedonistic (novelty seeking). It is striking that past-positive TP, which is related to happiness and without past regrets (Shores & Scott, 2007), is not associated with spirituality, and that future TP is the only one to be, albeit weakly, connected with this leisure benefit. This could be explained by the fact that people with a strong future orientation have a greater need to disconnect and seek spiritual benefits in their free time owing to the high demands that they constantly impose upon themselves in their work or studies, although this must be explored in greater depth. Neither past-negative nor present-fatalistic TPs were associated with the five leisure benefits sought. This incapacity to appreciate leisure benefits may be linked to the dysfunctional character with which these two TPs have been catalogued in the field of psychology (Sircova et al., 2014).

Third, interesting conclusions have been reached after analysing the relationship between TPs and leisure activities (Proposition 3). Past-negative is not positively related to the frequency of participation in any leisure activity, which provides additional evidence to support that this TP is dysfunctional. We noted that past-positive TP tends to relate positively to indoor activities, which may explain why people with a strong past-positive orientation tend to spend more time with their families (Holman & Zimbardo, 2009). More specifically, the past-positive TP is positively related to six of the 25 leisure activities, some of which may evoke the past (e.g., listening to music and the radio, reading books) or are activities that involve the creation and maintenance of social networks (e.g., talking on the phone and using instant messaging services). This is to be expected if we bear in mind that nostalgia (Boniwell & Zimbardo, 2004) and friendliness (Zimbardo & Boyd, 1999) are two of the aspects that are closely related to the past-positive perspective.

The present-fatalistic and present-hedonistic TPs are positively associated with five activities each one. These TPs tend to participate more frequently in certain outdoor activities than do the past-positive TP: the present-fatalistic perspective is associated with travel and tourism, and attending concerts, sporting events, and theatre or similar activities, while the present-hedonistic perspective is associated with shopping, as previous studies had led us to expect (Karande &

Merchant, 2012), and going for a walk. Both present orientations are associated with watching TV, as was also reported by Epel et al. (1999).

Future TP is only positively associated with reading newspapers, and would thus appear to be a TP that reduces the frequency of participation in certain leisure activities (e.g., listening to the radio and music, resting and time out, playing a musical instrument, playing video games or online games). The results obtained as regards future TP are the opposite of those obtained by Philipp (1992), who observed that future-oriented people tend to seek many leisure activities more frequently than other individuals. The differences between Philipp's findings and the results of the present study could be explained, at least in part, by the notable differences in study design as regards: (1) the sample size and profile (149 adults living in a metropolitan area vs. 374 undergraduate and Master's degree students); (2) the cultural context (U.S. vs. Spain); or (3) the TP scale used (the Experimental Inventory vs. the ZTPI).

With regard to the fourth proposition, the BTP group's amount of free time available is different to that of the non-BTP group, since the former has less free time than the latter on both weekdays and Sundays. However, the BTP group places more importance on four of the five benefits (sociability, physical fitness, learning and competence testing, and spirituality), while there is no difference in the case of case of risk taking. The reason why these people are prepared to recognise the various benefits derived from each of the leisure activities that they pursue may be related to the BTP group's capacity to adapt to different situations (Boniwell & Zimbardo, 2004). Both the BTP and non-BTP groups participate in almost all leisure activities to a similar extent, with the exception of going out for a drink, nightlife, and resting and time out. These three activities are pursued to a lesser extent by the BTP group. Differences between the BTP and non-BTP groups as regards their frequency of participation in activities without content (i.e., resting and time out) could explain why individuals with a BTP make the most of their leisure time (Boniwell & Zimbardo, 2003). The reason why they pursue other activities (going out for a drink and nightlife) to a lesser extent may be that people with a BTP are not as prone to pursuing activities that may interfere with the balance associated with their lifestyles.

The conclusions drawn in the previous paragraph allow us to add evidence to that obtained by Shores and Scott, who consider that past-positive and future orientations are healthy TPs for shaping our free time. Based on the empirical evidence presented here, perhaps having a BTP is what guarantees a more adequate and healthy enjoyment of leisure. In fact, it is probable that this capacity to make the most of one's leisure time (independently of whether one has more or less free time) is one of the reasons why numerous previous studies have reported a direct relationship between having a BTP and subjective well-being. A BTP therefore offers considerable potential for practical interventions. The focus of leisure time management techniques can develop interventions based on an understanding of people's TP biases that unconsciously dominate their lives and leisure time. These techniques may be useful to attain a BTP and for solving the dilemmas of a work-leisure balance (Boniwell & Zimbardo, 2003). The BTP group is also an attractive segment for leisure service providers. The fact that individuals with a BTP are more likely to seek a large number of leisure benefits makes them a target market when launching new leisure products/services, since it is probable that they will capture the additional benefits that these provide more quickly.

Practical implications for leisure-related businesses can also been derived from our findings. On the one hand, people with different TPs are more or less likely to be influenced by different forms of media. The sponsorship of sporting events or concerts could thus be an appropriate way of impacting on individuals with a strong present-fatalistic TP owing to their greater propensity to attend these events. Advertising in social networks might be more appropriate as regards transmitting messages that are intended for a present-hedonistic audience, while advertising in newspapers and magazines might prove to be more effective when targeting a public with a future TP. Past-positive, present-fatalistic and present-hedonistic TPs are more likely to be influenced by TV advertising. These three TPs may differ from each other as regards the types of TV programmes that they watch, although this idea must be examined in greater depth. On the other hand, TPs would be a key segmentation criterion for the different leisure business. Past-positive oriented people seek benefits related to sociability along with learning and competence testing, and they would be a target market for book publishing groups, radio and music industries, or mobile telephone companies. Present-fatalistic people are likely to be an attractive segment for tourism companies and the show business (e.g., theatres, concerts, sporting events). Present-hedonistic oriented people are presented as a target market for night entertainment, shopping centres, department stores and outlets. Future-oriented individuals would appear to be the segment of greatest interest for the online and published press sector.

Several limitations should be considered when interpreting the results of this study, the first set of which is related to the fact that the TPs in this paper have been conceptualised and operationalized as a personality trait. Although Zimbardo and Boyd (1999) pointed out that a TP may become a relatively stable dispositional characteristic, recent research findings suggest that high-risk activities may change an individual's TP (Shavit, Rosenboim, & Shani, 2014). Interestingly, Shavit et al. (2014) showed that high-risk activities (e.g., skydiving) affect TPs (i.e., people become present-oriented) even when people voluntarily choose to engage in the activity and also when the activity is limited in time and does not require long-term engagement. This suggests that future research should use experimental designs to analyse to what extent engaging in a leisure activity may affect an individual's TP. The second set of limitations concerns the sample used in this study: a sample of 320 Spanish university students. Although the use of a relatively homogeneous sample of students is suitable for an exploratory study, and while some of the studies reviewed used smaller samples (e.g., Epel et al., 1999; Karande & Merchant, 2012; Lukavska, 2012; Philipp, 1992), it would be valuable to evaluate whether the results presented here are consistent with those derived from general population samples. A further constraint is that the sample is framed in the context of the Western culture: Spain. Research by Hofstede, Hofstede, and Minkov (2010) highlighted how cultures differ in their time orientation (long-term vs. short-term orientation). Future research directions could consequently include cross-cultural comparisons (e.g., Western vs. East Asian cultures). Thirdly, when interpreting the results it is necessary to bear in mind that the explanatory power of some models is relatively low. The extent of an individual's involvement in leisure activities may be influenced by a large number of factors and constraints (Ajzen & Driver, 1991; Godbey, Crawford, & Shen, 2010), some of which have not been considered in this research. Finally, despite the fact that using the ZTPI has allowed us to explore the relationships between five TPs and having a BTP and leisure choices in great detail, recent studies also reveal the possibility of a future-negative orientation (Carelli et al., 2011). In future studies it would be interesting to analyse the role of these different versions of future orientation in leisure choices.

In addition to the future research suggested in the previous paragraph, analysing how people with different TPs relate to other individuals in leisure contexts is also a promising line of inquiry, and more specifically, whether there are conflicts among people with different TPs as regards the leisure benefits they seek and the types of activities they wish to engage in.

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