# INTERNATIONAL STUDIES IN TIME PERSPECTIVE

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MARIA PAULA PAIXÃO JOSÉ TOMÁS DA SILVA (COORD.) VICTOR ORTUÑO PEDRO CORDEIRO (EDITORS)

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# Chapter 9 Time Perspective orientation and Big-Five dimensions: An exploratory study in the Portuguese population

Pedro Figueira Rui Bártolo-Ribeiro ISPA – University Institute / CAP, Portugal pfigueira@ispa.pt rbartolo@ispa.pt

**ABSTRACT:** Zimbardo and Boyd (1999), with their Time Perspective scale, have shown relations between the time perspective's dimensions and Big-Five's dimensions. Recent studies (Dunkel & Weber, 2010) show the existence of such relations. The present study used the Portuguese version of Zimbardo Time Perspective Inventory (Ortuño & Gamboa, 2008) and the short version (10 itens) of Big Five Inventory (Rammstedt & John, 2007), adapted to Portuguese by Bártolo-Ribeiro and Aguiar (2008). Both scales were applied to 326 participants in two different application contexts (online and face-to-face). The results shows that different temporal perspectives are associated to different personality dimensions, confirming in a global way the results already found in previous studies with other personality questionnaires, namely significant correlations between negative past and neuroticism; positive past and agreeableness; hedonist present with extraversion; fatalist present with conscientiousness (negatively); and future with conscientiousness.

Keywords: time perspective, big-five, ZTPI, connection

#### INTRODUCTION

"It's all a matter of time"

We can remember our past experiences, we can think of what we are doing now, and we can imagine what we will do in the future. All of these processes leave traces in our mental organization, which may influence our personality organization.

In Zimbardo's & Boyd's (1999) Time Perspective Theory, the time orientations (past, present and future) are viewed as a basis dimension of human functioning. In this line, it is defended that all the lived experiences by an individual are codified in specific time frames. If there were no such time frames it would be impossible for the individual to maintain an order and coherence of the events.

The importance of these time frames does not restring the codification, storage and the coherent retrieval of living experiences, but also involves the formation of expectations and objectives which influenced decisions, judgments and actions.

The balance between these time frames may be thinking as a differentiating variable between the individuals, existing certain situations in which the individual focuses more in information contained in the past, present or future frame. Zimbardo, Keough & Boyd (1997) state that when this focus process is cronical in one of the time frames, it can be considered as a personality trait.

Zimbardo & Boyd (1999) have created the Zimbardo Time Perspective Inventory (ZTPI) for theory validation. Despite their instrument had been developed for measuring 3 dimensions, they identified 5 dimensions: negative past, positive past, hedonist present, fatalist present and future. The authors also have identified relations between these dimensions and the Big-Five model dimensions (see Table 1).

	Positive Correlation	Negative Correlation
Negative Past	Neuroticism	Agreeableness, Conscientiousness and Extraversion
Positive Past	Agreeableness and Extraversion	
Hedonist Present	Extraversion and Neuroticism	Conscientiousness
Fatalist Present	Neuroticism	Openness, Conscientiousness and Extraversion
Future	Conscientiousness, Extraversion and Openness	

Table 1 – Zimbardo & Boyd (1999) correlations between the ZTPI dimensions and the Big-Five

More recently, Dunkel & Weber (2010) have performed a correlational study between the ZTPI and the Big-Five dimensions (Table 2).

	Positive Correlation	Negative Correlation	
Negative Past	Neuroticism	Openness, Agreeableness and Extraversion	
Positive Past	Agreeableness and Extraversion	Neuroticism	
Hedonist Present	Openness, Extraversion and Agreeableness	Conscientiousness and Neuroticism	
Fatalist Present		Conscientiousness	
Future	Conscientiousness, Agreeableness and Neuroticism		

Table 2 - Dunkel & Weber (2010) correlations between the ZTPI dimensions with the Big-Five

Once again, and in comparison with the previous table, some correlations are repeated in the Zimbardo & Boyd (1999) and Dunkel & Weber (2010) studies. Only looking at the more significant correlations (p < 001) that are repeated in both studies, we observe that Negative Past relates to Neuroticism, Possitive Past relates to Agreeableness, Hedonist Present relates to Extroversion, Fatalist Present negatively relates to Consciousness and Future relates to Consciousness, being the Openness the only dimension of Big-Five that doesn't seem to stabilize crossing these two studies.

However, it's important to refer that this data relates to American samples which turns relevant to explore the relations of TP with the Big-Five on Portuguese population.

Despite the current study has an exploratory objective, it's not expected that the found relations between TP and Big-Five in the Portuguese population, will be much different of the ones that were found in the data crossing by Zimbardo and Boyd (1999) and Dunkel and Weber (2010).

## Method

#### Sample

This study has counted with 326 participants (60% male) with an age average of 29,3 years and a standard-deviation of 8,96, being the youngest participant 16 years old and the oldest 63 years old.

#### Instruments

The following instruments were used in order to study the relation between TP and the Big-Five model:

*ZTPI* (Zimbardo & Boyd, 1999), portuguese version translated by Ortuño & Gamboa (2008). The 56 items inventory allows to measure the fin dimensions of time perspective 5 dimensions (Negative past, Positive past, Hedonist present, Fatalist present and Future).

*BFI-10* (Rammstedt & John, 2007), an adapted version to Portuguese population by Bártolo-Ribeiro and Aguiar (2008), is a short version of 10 items of BFI-44. It measures 5 Big-Five dimensions (Openness, Agreeableness, Conscientiousness, Extraversion, and Neuroticism) in one minute or less.

# Procedure

The data collection was performed in two application contexts: one in a face-to face way, using paper and pen (19,3% of the sample) and other in an online way, using "Kwik Surveys", a platform that allows to apply questionnaires for site disclosure.

## RESULTS

To explore the relations of TP model and the Big-Five model, we performed a correlation analysis between ZTPI and the BFI-10 dimensions (Table 3).

	BFI-10 dimensions					
ZTPI dimensions	Openness	Agreeableness	Conscientiousness	Extraversion	Neuroticism	
Negative Past	03	19***	25***	07	.37***	
Positive Past	02	.28***	01	.20***	1	
Hedonist Present	.22***	.16**	16**	.28***	.08	
Fatalist Present	13	07	24***	01	.15**	
Future	.12*	.17**	.44***	.09	.06	

Table 3 - Correlations between the ZTPI and the Big-Five Dimensions

N=326. \*p<0,05; \*\* <0,01; \*\*\*p<0,001

Like it is suggested in Table 3, different TP's dimensions relate to different Big-Five traits. Reporting most significant correlations, Negative Past is positively correlated with Neuroticism, but negatively with Conscientiousness and Agreeableness. Positive Past is associated with Agreeableness and Extraversion. Hedonist Present is correlated with Extraversion and Openness. Fatalist Present has a negative correlation with Conscientiousness. Finally, is verified a strong and direct correlation between Future and Conscientiousness, contrary to negative relation with Negative Past.

#### DISCUSSION AND SOME CONSIDERATIONS

This study demonstrates that the relations between the TP and the Big-Five dimensions in a portuguese sample, at least the more significant (p<.001), don't differ significantly from the studies with American samples (Zimbardo & Boyd, 1999; Dunkel & Weber, 2010), except the relation between Negative Past and Extroversion that may suggest the existence of cultural differences in the way that people deal or compensate their negative past experiences.

Our research also sustains the use of reduced scales (e.g. BFI-10), enhancing the idea of Robins, Tracy, Trzesniewski, Potter & Gosling (2001), that these short versions are faster but, also, reliable measuring instruments when applied in research contexts. However, in future studies it would still be relevant to use more complete personality scales to access not only the 5 dimensions of superior order, but also its sub dimensions in order to draw a more complete personality profile.

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