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Article

Temporary Perspective in Priests, Nuns and Catholic Seminarists

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ABSTRACT

The relation between religiosity and temporal perspective has been scarcely studied since the emergence of the psychology of religion in the early twentieth century. There is no known study with priests, nuns, and Catholic seminarians about it according to our database search. The objective of the present investigation was to explore if there were differences in the temporal perspective in a sample of catholic priests, nuns, seminarians, and laypeople. Zimbardo Time-Perspective Inventory (ZTPI) scores obtained for 128 subjects, between 18 and 70 years, at total and item level were analyzed using ANOVA. The lay group differs significantly from Catholic priests, nuns, and seminarians in the present hedonistic and fatalist present. The temporal perspective makes it possible to differentiate significantly between the laity and the three groups of Catholic religious for the fatalistic and hedonistic present.

Perspectiva Temporal en Sacerdotes, Monjas y Seminaristas Católicos

RESUMEN

La psicología de la religión surgida a principios del siglo XX ha estudiado escasamente la relación con la perspectiva temporal. Y no se conoce ningún estudio con sacerdotes, monjas y seminaristas católicos al respecto según nuestra búsqueda en base de datos. El objetivo de la investigación fue explorar si existían diferencias en la perspectiva temporal en una muestra de sacerdotes, monjas, seminaristas católicos y laicos.

Se aplicaron los instrumentos psicométricos Inventario de Orientación Temporal de Zimbardo (ZTPI) a 128 sujetos, entre 18 y 70 años. Se realizó un estudio transversal cuantitativo con alcance descriptivo para comparar los grupos. Para ello se utilizó ANOVA y análisis de ítems. En la perspectiva temporal, se observa que el grupo de laicos se diferencia significativamente de sacerdotes, monjas y seminaristas católicos en presente hedonista y presente fatalista. La perspectiva temporal permite diferenciar significativamente entre laicos y los tres grupos de religiosos católicos con respecto al presente fatalista y presente hedonista.

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"Time" and "religion" are two human dimensions that potentially facilitate giving meaning to the human experience (James, 1902/2002; Lewin, 1942; Lowicki et al., 2018; Mead, 1932).

The person is a temporary being, and this dimension allows us to understand the self-organization of personal knowledge (Quiñones et al., 2015) and self-regulation in daily social life (Buhusi & Meck, 2005; Milfont & Schwarzenthal, 2014), among other things.

Cartwright (1951), in his compilation work on Lewin, displayed that an individual's behavior, mood, and morale depends on their psychological view of the past and future "existing at a given time" (p. 75). Extending this idea, Zimbardo and Boyd (1999, 2008) developed a conceptual model of time perspective (TP), is also understood as the attitude and focus of people towards one or more of the three temporal zones: Past, present, and future. It is argued that the focus tends to be relatively stable over time and, in general, people are focused on one of the dimensions, implying consequences on their cognitions, emotions, and behaviors. Zimbardo and Boyd (1999), suggest that the three temporal zones include five temporal dimensions:

- Past-positive, referring to the vision of positive experiences and experiences that the person has had in the Past (e.g. "I'm happy to think about my past");
- Past-negative, in which the attitude towards the Past focuses on negative experiences that may be due to stressful or traumatic situations, or negative evaluation of past experiences (e.g. "It's hard for me to forget unpleasant images of my youth");
- Present-hedonistic represents the focus on the search for enjoyment and delight (e.g. "I believe that getting together with one's friends to party is one of life's important pleasures.");
- Present-fatalist, represents a negative attitude towards current events and experiences, focusing on discouragement and hopelessness of what may happen with life (e.g. 'Since whatever will be will be, it doesn't really matter what I do");
- Future is the dimension that characterizes a focus on planning and goal achievement (e.g. "I complete projects on time by making steady progress").

In general, the temporal perspective has been empirically studied in the following fields of knowledge: Psychopathological disorders (Ryu et al., 2015), emotional and mood disorders (Droit-Volet, 2013), high-risk behavior (Boyd & Zimbardo, 2005), substance abuse (Keough et al., 1999); alcohol-related problems (McKay et al., 2018), basic psychology (Block et al., 2010), psychotherapy processes (Quiñones et al., 2017), meditation (Wittmann et al., 2015), case formulation in psychotherapy (Quiñones, 2021, 2024a, 2024b; Quiñones & Ugarte, 2022), psychological profile and bariatric surgery (Ugarte et al., 2020), psychological profile in type II diabetes (Quiñones et al., 2018), religiosity (Allport, 1950; Lowicki et al., 2018), among others.

In particular, it has been reported that people with a fatalistic present (Anagnostopoulos & Griva, 2012; Zimbardo & Boyd, 1999) and a hedonistic present (Roseanu et al., 2008) have been reported to have more psychological difficulties and are more exposed to depression. Furthermore, Fatalist present it is related to low self-esteem (Zimbardo & Boyd 1999; Anagnostopoulos & Griva, 2012), but no relationship was found between present hedonistic and self-esteem (Zimbardo & Boyd, 1999).

The hedonistic present perspective was positively correlated with risky behaviors, addictions, aggression, depression, sensation and the search for novelties (Daugherty & Brase, 2010; Rothspan

& Read, 1996; Zimbardo et al., 1997), while the present fatalistic perspective was positively correlated with neuroticism, aggression, depression, characteristic anxiety and life dissatisfaction (Stolarski et al., 2014).

These five temporal dimensions configure one profile: balanced time perspective (PTB). Balanced time perspective (BTP) is understood as "the mental ability to switch flexibly among TPs depending on task features, situational considerations, and personal resources rather than be biased toward a specific TP that is not adaptive across situations" (Zimbardo & Boyd, 1999, p. 1285).

Numerous studies have shown exciting relationships regarding balanced time perspective, including correlations with subjective well-being (Drake et al., 2008; Stolarski et al., 2015, Stolarski, 2016) and with psychological well-being, self-esteem, and life satisfaction (García et al., 2016). Higher BTP is associated with higher life satisfaction and general happiness (Barsics et al., 2017; Simons et al., 2018), extraversion (Zajenkowski et al., 2016), positive orientation (Sobol-Kwapińska & Jankowski, 2016), satisfaction with interpersonal relations (Stolarski et al., 2016), mindfulness (Selma & Sircova, 2013) and emotional intelligence (Stolarski et al., 2011).

Moreover, the interest of psychology in religion has a history. One of its leading researchers was William James in his work "The varieties of religious experience" (1902/2002). Religion can be defined as adherence to common beliefs, behaviors, and practices associated with a particular tradition and community of faith, which provides guidance and supervision (Hill et al., 2000). In the psychological context, the classic work of Gordon Allport (1950) represented Religiosity as a relatively stable disposition assessable by self-report tests. Thus, with the pioneering work of Allport and Ross (1967), religious orientations began to be studied empirically. They distinguished two motivational approaches to religion: intrinsic religious orientation and extrinsic religiosity.

Intrinsic religious orientation characterizes people who see religion as a central motive in their lives and interpret it as an end in itself. And people with extrinsically oriented tend to use their faith as a means of achieving other goals. It is noteworthy that research on religious orientations has contributed to understanding their relationships with mental health (Ghorbani et al., 2012). Different authors suggest that the intrinsic orientation towards religion is associated with higher subjective well-being, while an extrinsic orientation towards religion is associated with negative emotions, anxiety, or depression (Ellis & Wahab, 2013; Koenig et al., 2004).

The relationship between religiosity and well-being is not homogeneous. While religious practices are often argued to serve as protective factors, the literature also suggests potential risks. For instance, Braam et al. (2001) found that in European elderly populations, regular attendance at religious services, particularly among Roman Catholics, was associated with lower levels of depression, although the impact varied depending on the sociocultural context. Braam et al. (2019) expanded on this perspective by identifying that the protective effects of religiosity in later life may depend on the prevailing religious climate, highlighting that religious practice is associated with lower depression rates both at the individual and national levels, particularly in traditional Catholic contexts with high levels of church attendance.

van de Velde et al. (2017) noted that while attendance at religious services improves mental health in highly religious contexts, private practices, such as prayer, might not have the same effects

in more secular environments. These observations emphasize that the influence of religiosity is mediated by contextual factors, such as the level of religiosity prevalent in the geographical and cultural environment. Additionally, Braam & Koenig (2019) highlighted that depending on the sample, religiosity can act as either a protective or a risk factor for mental health. This finding underscores the importance of examining not only religious practices but also religious struggles or conflicts, which are associated with higher levels of depression.

In the field of research on religious and spiritual beliefs and practices in human health, there is strong evidence of its impact (Koenig et al., 2012), such as: Better results when patients have greater faith and spirituality during treatment for cancer (Messina et al., 2010); correlation between religious practice and the reduction of cardiovascular mortality (Hummer et al., 1999); Lower mortality rates for patients who adhere to religious practices or who live in areas considered affiliated with religious practices (Jaffe et al., 2005). However, the complexity of these relationships, as noted by Braam et al. (2019), highlights the need to consider both the benefits and challenges that these dimensions may pose to mental health, depending on factors such as the type of religious practice and the level of religious conflict.

In this regard, Tokarz and Łowicki (2024) identified significant differences between Christian denominations, highlighting that religiosity can be associated with general well-being, such as life satisfaction and a sense of meaning in life, but these relationships are also influenced by specific characteristics of each denomination. In their study of Roman Catholics and Pentecostal Christians, they found that Pentecostals reported higher levels of religiosity and social support, reinforcing the idea that certain aspects of well-being, such as a sense of meaning in life, may depend on both general factors related to religiosity and denomination-specific characteristics.

This context demonstrates that the relationship between religiosity and well-being is multidimensional and influenced by various individual and sociocultural factors.

There is limited research on religiosity and time perspective. According to our database search, to date, the association between time orientation and religiosity has been explored in some relevant studies, albeit limitedly, and only one included an exclusive sample of nuns. Other studies have not included samples of priests, nuns, or seminarians. Lowicki et al., (2018) conducted a series of three studies with a predominantly Catholic sample (N > 700), providing an in-depth empirical view of the interaction between individual differences in the temporal framework of human experience and various characteristics of religiosity, including general belief in God, Allport's religious orientations, Huber's centrality of religiosity, and religious fundamentalism.

Their research found that the positive aspects of religiosity are correlated with a time perspective of a positive past and future. Furthermore, the present temporal focus was associated with instrumental and fundamentalist approaches to religious belief. Overall, their results suggest that religiosity is linked to a broad temporal profile and that the associations between time perspectives and religiosity remain significant even after controlling for personality traits.

Przepiórka and Sobol-Kwapinska (2018), on the other hand, provided evidence on how religiosity can moderate the relationship

between time perspective and life satisfaction. Their study, conducted with Polish adults, showed that extrinsic religiosity (ER) attenuates the negative effects of a time orientation focused on a negative past and a fatalistic present, thereby improving life satisfaction. Meanwhile, intrinsic religiosity (IR) was more strongly associated with internal values and meaningful spiritual experiences, highlighting differences in how each type of religiosity influences time perspectives and psychological well-being.

Similarly, Stewart-Sicking & Piedmont (2022) explored how time perspective can predict religious affiliation and spiritual practices. They identified that a fatalistic present orientation is associated with lower levels of religious affiliation, while spiritual transcendence—defined as the ability to situate oneself beyond the immediate present and view life from a broader context—plays a crucial role in decision-making regarding religious participation. This concept reinforces the idea that the interaction between religiosity and time perspective encompasses profound existential dimensions.

Finally, Collazos-Ugarte et al., (2024) investigated time perspective in a sample of 283 Italian nuns, using the Balanced Time Perspective Scale (BTPS) developed by Webster (2011). They found that both emotional intelligence and intrinsic religiosity significantly contribute to a balanced time perspective (BTP), a positive temporal profile that balances perceptions of the past and future. Additionally, the study highlighted that emotional intelligence is mediated by intrinsic religiosity, amplifying its benefits on BTP. This finding underscores how religious beliefs not only influence perceptions of time but also contribute to a deeper understanding of emotions, fostering both individual and collective well-being in religious communities.

Therefore, it is essential to further investigate the potential links between time perspective and religion. In the present study, time perspective (TP) is defined according to Zimbardo and Boyd (1999) as "the often nonconscious process whereby the continual flows of personal and social experiences are assigned to temporal categories, or time frames, that help to give order, coherence, and meaning to those events" (p. 1271).

The purpose of this cross-sectional study was to explore whether there were differences in time perspective in an intentional sample of Catholic priests, nuns, seminarians, and laypeople.

Method

Participants

A non-probability convenience sample of 128 people between 18 and 70 years, divided equally into four groups: 32 priests, 32 nuns, 32 seminarians, and 32 laypeople. All participants resided in Chile, specifically in Santiago, Concepción, and Iquique. Participation was voluntary, with signed informed consent.

The exclusion criteria were not belonging to the Catholic religion, not being self-reliant, or being illiterate. In the case of laypeople, the group included individuals with varying levels of religious practice, ranging from regular churchgoers to those with minimal participation in religious activities. This variability was not controlled in the present study, and all lay participants who identified as Catholic were included regardless of their level of religious engagement.

Instruments

As participants are religious consecrated to God, Religiosity is implicit in the role they exercise, specifically in the role of Nun, Priest, and Seminarian. Likewise, the group of laypeople belongs to the Catholic religion, but they do not exercise a consecrated activity.

Zimbardo Time Perspective Inventory, ZTPI, version adapted for Chile by Oyanadel et al., (2014). It is an instrument of 56 items that are scored on a Likert-type scale that ranges from 1 to 5. The instrument measures the five dimensions of Zimbardo's Temporal Orientation theory: Past Positive (PP), Past Negative (PN), Present Hedonist (PH), Present Fatalist (PF) and Future (F). Each item is on a five-point Likert scale ranging from 1 (very uncharacteristic) to 5 (very characteristic). Higher scores reflecting a stronger orientation toward that particular item's TP. The reliability analysis in the Chilean population shows a Cronbach's alpha of .80 for Past Negative and Future, of .79 for Present Hedonist and .74 for Present Fatalistic. The lowest indicator has been reported for Past Positive with Cronbach's alpha of .59, being at a moderate level.

Stolarski et al. (2011), provided a continuous indicator of BTP labeled Deviation from the BTP (DBTP). Furthermore, to calculate the deviation from the balanced time perspective (DBTP) (Stolarski et al., 2011; Zajenkowski et al., 2016) the formula was used which is based on ZTPI scores and serves as an indicator of BTP (Zhang et al., 2013). From a mathematical point of view, DBTP is the root of the sum of the squared deviations of a person's scores (i.e., ePN) from the optimal score on each scale (i.e. oPN) (Stolarski et al., 2011). This method is considered optimal among the existing BTP evaluation methods (Stolarski et al., 2016). The formula is as follows:

$$DPTB = \sqrt{(oPN-ePN)^2 + (oPP-ePP)^2 + (oPF-ePF)^2 + (oPH-ePH)^2 + (oF-eF)^2}$$

An ideal score for each TP scale was adopted on the basis of optimal ZTPI raw scores (1.95 [oPN], 4.60 [oPP], 1.50 [oPF], 3.90 [oPH] and 4.00 [oF]) (Zhang et al., 2013; Stolarski et al., 2015).

$$DPTB = \sqrt{(1.95-2.64)^2 + (4.60-3.83)^2 + (1.50-2.38)^2 + (3.90-2.99)^2 + (4.00-3.73)^2}$$

A low DBTP score (closer to zero) indicates a more balanced time perspective (Zhang et al., 2013), characterized by an equilibrium among temporal dimensions, which is associated with greater psychological well-being and better emotional integration (Stolarski et al., 2011). In contrast, a high score reflects a greater deviation from this balance, which may be related to difficulties in reconciling past, present, and future experiences.

Each deviation in the temporal subscales provides information about specific areas where participants exhibit significant differences from the ideal balanced time perspective. For example, a high deviation in the Past Negative subscale indicates a more critical or traumatic view of the past, while a deviation in the Present Fatalistic subscale may reflect more pessimistic attitudes toward the present. These interpretations are crucial for analyzing the differences among the study's subgroups.

Short Form 36 Health Survey (SF-36: It was designed to assess the perception of health-related quality of life in adults (Ware & Sherbourne, 1992). The instrument shows good indicators of reliability and validity in different countries as well as in Chile (Olivares, 2006). It contains 36 items that evaluate eight dimensions of health, grouped into two components: 1) Physical Health Component: a) Physical function, b) Physical role, c) Body pain, d) General health; 2) Mental Health Component: a) Vitality, b) Social function, c) Emotional role, and d) Mental health. In addition, it evaluates the evolution of health in the last year. The results of each of the dimensions are coded and transformed into a scale ranging from 0 (worst state of health) to 100 (best state of health).

Sociodemographic variables: Sex, age, educational level, current activity, whether religious (Priest, Nun, Seminarian) or layperson, were considered. These data were obtained through an ad hoc questionnaire carried out to obtain specific information of interest to our study.

Procedure

Contact was made with the representatives of the churches, specifically the respective superiors for nuns, priests, and seminarians. Face-to-face meetings were held with ecclesiastical authorities, during which they requested to review the project, psychometric instruments, sociodemographic files, and informed consent forms. Once their approval was obtained, 150 dossiers containing the instruments and their respective informed consents were delivered to the ecclesiastical authorities, who were responsible for distributing them to participants within their communities. The instruments were self-administered and returned by participants at different times.

For the laity, Catholic participants were contacted directly by the researchers. The instruments were self-administered with an average completion time of 40 minutes. Although evangelicals were initially contacted for potential participation, the final sample only included Catholics, ensuring consistency across the religious affiliation of all participants.

The sample consisted of 128 subjects, equally distributed across the four groups (n = 32 per group). Participation was voluntary and required the signing of informed consent. To maintain confidentiality, each participant was assigned a unique identification number. The data were recorded in an Excel spreadsheet and subsequently imported into SPSS for analysis.

Note on Data Collection Differences

While the data collection process involved ecclesiastical authorities for the religious groups and direct contact for the laity, this approach was chosen to respect the organizational structure of the religious institutions. These differences are acknowledged as a limitation of the study and are discussed further in the Limitations section.

Data Analysis

Descriptive analysis for sociodemographic characterization and item response was performed. The Deviation from Balanced Time Perspective (DBTP) was used as a dependent variable to examine differences among the studied groups (priests, nuns, seminarians, and laypeople) in their level of balanced time perspective.

The normality of the data was assessed using the Shapiro-Wilk test, given its higher sensitivity for small to medium-sized samples. The results indicated that the variables PN, PP, PH, PF, and F met the assumption of normality (p > 0.05). However, the variable PTbalanceado (DBTP) and all dimensions of the Short Form 36 Health Survey did not meet this assumption (p < 0.05). Consequently, one-way ANOVA tests were conducted to compare groups across the variables of the Zimbardo Time Perspective Inventory, with effect size estimated using Eta-square (η^2). For the DBTP and the SF-36 dimensions, Kruskal-Wallis tests were employed due to the violation of the normality assumption, and effect size was calculated using the epsilon-squared (ϵ^2) statistic to provide a measure of the magnitude of group differences. Data analyses were carried out using the SPSS statistical package (V.25.0), and the criterion used to determine statistical significance in all analyses was set at p < 0.05.

Results

One hundred twenty-eight persons with ages between 18 and 74 years (mean of 38.06, SD=14.5) participated in the study. 18 persons (30%) are aged 60 or over. 75% of the sample corresponded to consecrated religious, and 25% were Catholic laity; 56.3% were women.

Table 1 shows the descriptions of the instruments.

The Figure 1 illustrates the BTP profile, locating "optimal" ZTPI raw scores at 1.95 for Past Negative, 4.6 for Past Positive, 1.5 for Present Fatalism, 3.9 for Present Hedonism, and 4.0 for Future. Zimbardo and Boyd (1999) propose this definition of BTP on Time Paradox webpage (www. timeparadox.com/surveys/).

ANOVA with Bonferroni posthoc tests was used to analyze differences between the four groups. Statistical significant differences were detected on Present-hedonistic (F = 8.27; p < 0.001) and Present-fatalistic (F = 5.90; p < 0.001) (See Table 2) The results of the Kruskal-Wallis test are shown in Table 3. Layperson showed scores significantly higher than priests (p < 0.001), nuns (p < 0.001), and seminarians (p < 0.000) in Present-hedonistic and Present-fatalistic. No differences were found between nuns, priests, and seminarians in these two variables (Figure 2).

Bonferroni post-hoc tests show that in physical function, seminarians have significantly fewer limitations to perform various physical activities than nuns (p = 0.003) and lay people (p = 0.006). No significant differences were observed between seminarians and priests on this scale. There were also no significant differences between the groups in other SF-36 scales.

Table 1Descriptive Statistics for Major Variables

	M (SD)	Min.	Max.	Kurtosis	SKEW	Alpha	(95% IC)
ZTPI							
Past Negative	2,64(0,50)	1,31	3,85	0,208	-0,033	.72	2,56 – 2,73
Past Positive	3,83(0,47)	2,38	4,88	-0,177	-0,311	.59	3,75 - 3,92
Present Hedonist	2,99(0,54)	1,64	4,36	-0,130	-0,019	.78	2,90 - 3,09
Present Fatalist	2,38(0,55)	1,27	3,91	-0,145	0,318	.71	2,28-2,47
Future	3,73(0,48)	2,10	4,90	0,486	-0,106	.61	3,65 - 3,81
SF-36							
Physical function	89,5 (14,8)	35	100	2,534	-1,728	.85	86,9 - 92,1
Role physical	83,3 (18,1)	18,7	100	1,383	-1,274	.85	80,2 - 86,5
Bodily pain	47,1 (15,2)	0	74	0,042	-0,081	.72	44,5 - 49,8
General health perception	72,3 (17,6)	25	97	0,473	-0,931	.75	69,2 - 75,4
Vitality	64,3 (12,1)	25	90	0,164	-0,327	.68	62,2-66,5
Social functioning	84,3 (19,3)	12,5	100	1,837	-1,464	.75	80,9 - 87,7
Role emotional	82,4 (16,4)	33,3	100	-0,159	-0,758	.70	79,5 - 85,2
General mental health	70,4 (12,1)	32	88	0,909	-0,984	.81	68,3 - 72,5
Evolution of health	2,16 (0,84)	1	4	-0,774	0,149	-	2,02-2,31

ZTPI: Zimbardo Time Perspective Inventory; SF-36: Short Form 36 Health Survey.

Figure 1BTP Profile and Time Perspective Profile of Sample

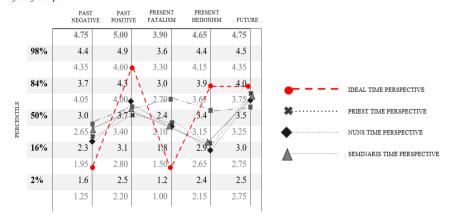


Table 2
Temporal Perspective ANOVA Results

ZTPI	Priests M(SD)	Nuns M(SD)	Seminarians <i>M(SD)</i>	Layperson M(SD)	F	p	η 2
Past – Negative	2,62(0,52)	2,58(0,51)	2,69(0,48)	2,70(0,52)	0,439	0,725	
Past – Positive	3,74(0,39)	3,95(0,53)	3,81(0,44)	3,84(0,50)	1,146	0,333	
Present - Hedonist	2,91(0,48)	2,79(0,49)	2,91(0,53)	3,38(0,52)	8,270	0,000	0,167
Present - Fatalist	2,34(0,50)	2,22(0,51)	2,22(0,53)	2,70(0,55)	5,901	0,001	0,125
Future	3,87(0,38)	3,76(0,51)	3,63(0,47)	3,69(0,53)	1,422	0,239	

ZTPI: Zimbardo Time Perspective Inventory

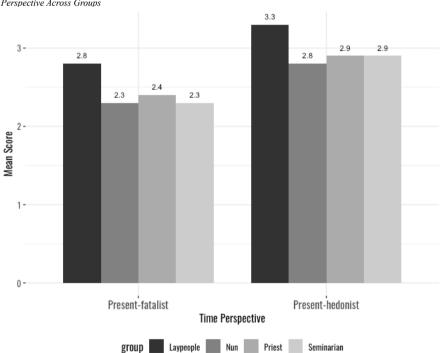
 Table 3

 Temporal Perspective and Short Form 36 Health Survey: Kruskall Wallis Results

	Priests Average rank	Nuns Average rank	Seminarians Average rank	Layperson Average rank	H	p	ε2
Deviation from Balanced Time Perspective (DBTP)	61,13	69,44	57,59	69,84	2,61	0,457	
			SF-36				
Physical function	61,36	57,03	79,94	59,67	8,41	0,038	0,066
Role physical	61,39	66,66	73,48	56,47	3,86	0,277	
Bodily pain	60,6	65,2	56,4	73,5	3,868	0,276	
General health perception	59,6	63,8	67,9	66,7	0,958	0,812	
Vitality	56,2	72,9	63,6	65,3	3,333	0,343	
Social functioning	56,5	73,3	71,9	56,4	6,750	0,08	
Role emotional	60,5	71,1	57,5	68,9	3,09	0,377	
General mental health	65,8	69,5	65,5	57,3	1,875	0,599	
Evolution of health	60,8	65,97	84,89	46,31	19,872	0,000	0,136

SF-36: Short Form 36 Health Survey.

Figure 2
Mean Score for Present Time Perspective Across Groups



An analysis of items of the present hedonistic and present fatalistic was performed to explore specific differences between groups. Differences were found in seven items from the hedonistic perspective (See Table 4) and five from the Fatalist perspective (See Table 5).

In all the analyzes, laity shows significantly higher scores, but significant differences were also observed in some items between the groups of religious persons. Table 6 presents the results of the post hoc comparisons that show the significant differences between the groups.

Discussion

The present investigation has two particularities.

First, a sample of Catholic priests, nuns, and seminarians can be considered representative of high religiosity groups. Second, this research is the first to explore the relationship between religiosity and temporal perspective across different groups of religious consecrated to God, including priests, nuns, and seminarians, using Zimbardo's theory of temporality. Our results do not coincide with that reported by the research by Lowicki et al. (2018) between Religiosity and temporality, and it is possible that it is fundamentally due to the specific characteristics of the sample. In our research that is with religious consecrated to God (Catholic priests, nuns, and

seminarians) we find significant differences in relation to the laity in the present temporal perspective only is with religious consecrated to God (Catholic priests, nuns, and seminarians) we find significant differences in relation to the laity in the present temporal perspective only.

More specifically, results show that in the Present-hedonist the laity differs significantly from priests (p<0.001), from nuns (p<0.001) and seminarians (p<0.000). Likewise, the laity differ significantly from priests (p = 0.015), nuns (p<0.001) and seminarians (p \leq 0.001) in the Present-fatalistic temporal perspective. Laity presents significantly higher scores in both temporal perspectives when compared with the three groups of Catholic religious. It should also be noted that no significant differences were found between Catholic religious (nuns, priests, and seminarians) in both variables.

The results found are consistent with that reported by research in general on temporality and psychological functioning. A layperson with greater Present-Hedonist scores can be related to a focus on the search for enjoyment and delight. On the other hand, the fact that laypeople present a greater focus on the Present-Fatalist dimension in no case implies a negative dimension of psychological functioning. However, dissatisfaction with life, on the contrary, is known to be associated mainly with the negative perspective of the Past and the present fatalistic perspective.

Table 4Present-Hedonist Items Differences Between Groups

Present-Hedonist items	\boldsymbol{F}	p	η <i>2</i>
I believe that getting together with one's friends to party is one of life's important pleasures.	2.04	0.112	0,047
I do things impulsively.	2.09	0104	0,048
When listening to my favorite music, I often lose all track of time	5.63	0.001	0,120
I try to live my life as fully as possible, one day at a time.	3.17	0.027	0,071
Ideally, I would live each day as if it were my last.	2.38	0.072	0,055
I make decisions on the spur of the moment.	5.32	0.002	0,114
It is important to put excitement in my life.	0.96	0.414	0,023
Taking risks keeps my life from becoming boring.	1.48	0.220	0,035
It is more important for me to enjoy life's journey than to focus only on the destination.	3.57	0.016	0,079
I take risks to put excitement in my life	0,83	0,479	0,020
I often follow my heart more than my head.	2.99	0.034	0,067
I find myself getting swept up in the excitement of the moment	5.26	0.002	0,113
I prefer friends who are spontaneous rather than predictable.	1.70	0.170	0,040
I like my close relationships to be passionate.	15.34	0.000	0,271

 Table 5

 Present-Fatalist Items Differences Between Groups

Present-Fatalist items	F	p	η2
Fate determines much in my life.	2.16	0.095	0,050
Since whatever will be will be, it doesn't really matter what I do.	0.53	0.660	0,013
I take each day as it is rather than try to plan it out.	2.96	0.035	0,067
I feel that it's more important to enjoy what you're doing than to get work done on time.	5.96	0.001	0,126
You can't really plan for the future because things change so much.		0.001	0,130
My life path is controlled by forces I cannot influence.	0.14	0.933	0,003
It doesn't make sense to worry about the future, since there is nothing that I can do about it anyway.		0.130	0,044
Life today is too complicated; I would prefer the simpler life of the past.		0.011	0,086
Spending what I earn on pleasures today is better than saving for tomorrow's security.	1.59	0.193	0,037
Often luck pays off better than hard work		0.013	0,083
There will always be time to catch up on my work.	1.35	0.261	0,032

Noteworthy, both differences in present hedonistic and present fatalistic, are not indicators of dysfunctionality and our statement is based on a deviation analysis of the balanced time perspective (p = 0.801). No significant differences were found between the groups in the future temporal dimension. We hypothesize that the absence of differences in this dimension is mainly due to the fact that it evaluates an approach towards planning and the achievement of objectives.

In this context, we must highlight that when comparing the sample data with the ideal time perspective (Zimbardo & Boyd, 1999), we observe deviations, especially in the Present-Hedonist and Present-Fatalist dimensions. For example, the scores for Present-Hedonist in the laity (M = 3.38, SD = 0.52) are higher compared to the scores of priests, nuns, and seminarians, but still below the ideal score of 3.90, indicating a moderate focus on immediate enjoyment and pleasure. Similarly, in the Present-Fatalist dimension, the laity (M = 2.70, SD = 0.55) score higher than the ideal score of 1.50, which may indicate a more negative view of present events and experiences. However, it is important to note that the Deviation

from Balanced Time Perspective (DBTP) values show that all subsamples (priests: 2.66, nuns: 2.71, seminarians: 2.63, laity: 2.69) exhibit a significant deviation from the ideal time perspective. The DBTP should be as close to 0 as possible to reflect an ideal balanced profile, with ideal scores set at 1.95 for Past Negative, 4.6 for Past Positive, 1.5 for Present Fatalism, 3.9 for Present Hedonism. and 4.0 for Future. These elevated DBTP scores indicate that the samples exhibit a more unbalanced temporal profile. It is also important to emphasize that the balanced time perspective profile is theoretical, and the scores obtained by the groups do not necessarily reflect a pathological imbalance. In the case of the religious groups (priests, nuns, and seminarians), this deviation could be attributed to the specific characteristics of their religious vocation and their dedication to the religious life. For instance, these groups score lower on Present-Hedonistic, which may be related to aspects of their religious activity, where immediate pleasure and the pursuit of personal gratification are not priorities, but rather a focus on transcendental and spiritual values.

Table 6 *Item Comparison Between Specific Groups*

Present- Hedonist items	Mean Difference	p
When listening to my favorite music, I often lose all track of time		
Layperson – Nun	.90	.020
Layperson – Seminarians	.87	.022
I try to live my life as fully as possible, one day at a time.		
Layperson – Priest	.84	.031
I make decisions on the spur of the moment.		
Layperson – Priest	.84	.005
Layperson – Nun	.84	.005
It is more important for me to enjoy life's journey than to focus only on the destination.		
Layperson – Priest	.78	.049
Layperson – Nun	.84	.026
Layperson – Seminarians	.66	.154
I often follow my heart more than my head.		
Layperson – Priest	63	.045
I find myself getting swept up in the excitement of the moment		
Layperson – Nun	.88	.001
I like my close relationships to be passionate.		
Layperson – Priest	1.34	.000
Layperson – Nun	1.71	.000
Layperson – Seminarian	.97	.002
Seminarian – Priest	.75	.340
Present- Fatalist items		
I take each day as it is rather than try to plan it out.		
Layperson – Nun	.72	.024
I feel that it's more important to enjoy what you're doing than to get work done on time		
Layperson – Nun	1.03	.002
**		
Layperson – Seminarian	1.03	.002
You can't really plan for the future because things change so much.	1.02	001
Layperson – Priest	1.03	.001
Layperson – Nun	.91	.006
Layperson – Seminarian	.88	.009
Life today is too complicated; I would prefer the simpler life of the past.		00-
Layperson – Seminarian	.91	.006
Often luck pays off better than hard work		0.4-
Layperson – Nun	.69	.013

From a theoretical perspective, the deviation from the balanced time perspective can have implications for psychological well-being and emotional integration, as a more balanced profile across the temporal dimensions evaluated is associated with higher levels of well-being. However, since the ideal profile is a theoretical construct, the deviations observed in the groups do not necessarily indicate malfunction or dysfunctionality, but rather an adaptation or differentiated approach according to the specific demands and values of each group, particularly in religious individuals who may adopt a more transcendent-focused perspective than one focused on hedonism or fatalism. This could influence their scores on the evaluated dimensions.

In addition, SF-36 in its mental health component did not show significant differences between the four groups. In other words, what we find in this research is interpreted parsimoniously in the direction that lay people have a focus on earthly life and religious a horizon of consciousness with a focus on the transcendent.

This research has limitations to consider. First, the sample included only Chilean participants and, in terms of religious affiliation, these were exclusively Roman Apostolic Catholics. Therefore, although the results of this research can describe quite accurately the Chilean Catholic believers consecrated to God (Catholic Priests, nuns and seminarians), they may also not reflect as well the religious attitudes of people from different countries who are Roman Apostolic Catholics. Second, the vast majority of the sample investigated were adults and young adults and, therefore, the elderly population (60 years) was underrepresented. This is an important limitation of our research because some significant differences in time perspective profiles between age groups have already been observed (Sobol-Kwapinska & Jankowski, 2016). It should therefore be pointed out once again that our results mainly concern the population of young adults.

An important limitation of this study was the lack of explicit control over differences in the level of religious practice within the lay group. Although all participants in this group identified as Catholics, no specific information was collected on the frequency of attendance at religious services or participation in community activities. As a result, the lay group included both regular practitioners and believers with minimal religious practice. This heterogeneity could have influenced the results, as previous research suggests that non-practicing believers may differ significantly from regular practitioners in key psychosocial aspects, such as subjective wellbeing and temporal perspective (Braam & Koenig, 2019; Stewart-Sicking & Piedmont, 2022). Without this distinction, the findings from the lay group may reflect a general average that does not adequately capture the individual differences within the subgroup. Future research should address this limitation by more precisely selecting participants, differentiating between practitioners and nonpractitioners. This would allow for a more detailed analysis and a more robust interpretation of how the level of religious practice influences the studied variables.

The data collection method differed slightly between the subsamples. For religious participants, instruments were distributed and collected by ecclesiastical authorities, while for the laity, the researchers directly contacted participants. Although this approach was necessary to respect institutional hierarchies and ensure access to the religious groups, it may have introduced subtle differences in the conditions under which the instruments were completed. Future

research should aim for a more uniform data collection process to minimize potential biases.

A replication of this research with other religions and to carry out studies in different cultures will help us to consolidate present results and get a better understanding of the studied phenomenon.

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Conflict of Interest

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