

FURTHER EVIDENCE: HAPPINESS IS ASSOCIATED WITH SPORTS PARTICIPATION AND BEING A RELIGIOUS BELIEVER

MÁS EVIDENCIA: LA FELICIDAD ESTÁ RELACIONADA CON PRACTICAR DEPORTE Y SER CREYENTE DE UNA RELIGIÓN

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Happiness is Linked to Sports Participation and Religiosity

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Several studies have documented a positive association between physical activity and higher levels of happiness (Zhang & Chen, 2019). Similarly, the scientific literature also shows that people with higher levels of religiosity tend to report greater happiness, a relationship that is consistent across different cultural contexts and religious traditions (Rizvi & Hossain, 2017). In the same vein, recent research suggests that religious and spiritual beliefs and practices may have a beneficial effect on health, encouraging the adoption and maintenance of healthy lifestyles, particularly in relation to physical activity (Kruk & Aboul-Enein, 2024).

Meanwhile, the Sociological Research Center (hereafter, CIS by its Spanish acronym) is a public institution attached to the Ministry of the Presidency (and its various historical denominations), which plans, designs, and conducts studies on the social reality of the population residing in Spain. Among its other functions, it conducts research based on survey methodology, maintaining publicly available databases that are accessible to the general public and, in particular, to the scientific community. The last two surveys in which the CIS examined sports habits in Spanish society were study number 3,029 (CIS, 2014) and study number 3,447 (CIS, 2024). Both studies make it possible to examine, within a broader set of variables, sports participation, religiosity, and the happiness of people residing in Spain.

Previous research by Tejero-González (2020), using the database from study number 3,029 (CIS, 2014), concluded that happiness is associated with both sports participation and religious practice, although the effect size of this relationship is small. In view of the above, and in line with Nosek et al. (2022), who argue that replicability is essential for the progress and advancement of scientific knowledge, the aim of this editorial was to test whether happiness in Spanish society, in the mid-2020s, remains associated with sports participation and religiosity.

Study number 3,447 (CIS, 2024) was analyzed. The sample consisted of 8,485 individuals aged between 16 and 98 years. Women represented 48.6% of the sample and men 51.4%. The sampling error was $\pm 1.1\%$ (95.5% confidence level, assuming simple random sampling). Using question 2 of the original questionnaire, two groups of individuals were identified based on their *sports participation*: yes (practices one or more sports) and no (previously practiced but not currently; does not practice sports; no response). *Happiness* was measured using question 13 (a 10-point scale, where 1 indicates that the respondent considers themselves completely unhappy and 10 completely happy). Question C4 made it possible to identify two sample groups according to *religiosity*: believers (practicing Catholics; non-practicing Catholics; believers of other religions) and nonbelievers (agnostics; non-believing individuals who are indifferent; atheists who deny the existence of God).

By combining the variables of *sports participation* and *religiosity*, four cohorts were identified: individuals who do not practice sports and are not religious (non-athletes and non-believers), individuals who practice sports and are not religious (non-believing athletes), individuals who do not practice sports but are religious (believing non-athletes), and individuals who practice sports and are religious (believing athletes). The happiness of the four cohorts was compared using ANCOVA, introducing sex and age as covariates. When statistically significant differences were found, effect size was estimated using partial eta-squared (η^2_p), interpreting the following thresholds: 0.010 (small effect), 0.060 (medium effect), and 0.140 (large effect). Analyses were conducted using IBM SPSS Statistics 31 (IBM Corporation, USA). The confidence level was set at 95% ($p < 0.050$).

For each cohort, its population representation was estimated in percentage terms (%), and its level of happiness was assessed using the arithmetic mean (M) and standard deviation (SD). The results identified 17% of individuals as non-athletes and non-believers ($M = 7.25$, $SD = 0.04$), 22% as non-believing athletes ($M = 7.61$, $SD = 0.03$), 35% as believing non-athletes ($M = 7.65$, $SD = 0.03$), and 26% as believing athletes ($M = 8.05$, $SD = 0.03$). It was observed that happiness levels differ significantly across cohorts, with a small effect size ($F = 65.318$, $df = 3$, $p < 0.001$, $\eta^2_p = 0.024$). Specifically, pairwise comparisons of the main effects using Bonferroni adjustment showed that: (1) the level of happiness of individuals who are neither athletes nor believers is statistically lower than that of the other cohorts (all $p < 0.001$); (2) the level of happiness of believing athletes is statistically higher than that of the other cohorts (all $p < 0.001$); and (3) there are no differences in happiness levels between non-believing athletes and believing non-athletes.

Thus, the results are consistent with the main conclusion of Tejero-González (2020): happiness is associated with both sports participation and religiosity, although with a small effect size. In the same vein, both studies agree on the statistical significance of most pairwise comparisons (although not entirely across the same cohorts). From a methodological perspective, it should also be noted that in Tejero-González (2020) the estimation of the religiosity variable was slightly different (including frequency of religious practice), and happiness was measured using an 11-point Likert scale (rather than a 10-point scale, as in the present study). It should also be noted that both studies follow a cross-sectional design, meaning that they report descriptive associations between variables and do not allow causal inferences to be drawn. Therefore, it cannot be stated that greater happiness is caused by participation in sports or by being religious.

Nevertheless, in our view, there is evidence suggesting that sports participation (when carried out in a healthy manner) and identifying as a religious believer (when done consciously) may share factors associated with happiness. Among these elements are the incorporation of life purposes, a sense of connectedness with others (sense of community), the internalization of cultural values of hope, the presence of moments for the expression of gratitude, and the promotion of self-care and well-being habits. This editorial confirms that individuals who are both athletes and believers report higher levels of happiness than the rest of the cohorts analyzed, with a small effect size, and particularly in comparison with those who are neither athletes nor believers.

Ethics Committee Statement

In accordance with institutional, national and international regulations and guidelines for research using non-identifiable secondary data, ethical approval was not required.

Conflict of Interest Statement

The author declares that there is no conflict of interest.

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Data Availability Statement

The primary dataset can be obtained from the Sociological Research Center at www.cis.es

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